

State of Washington

Variations in Life Expectancy and Mortality Rates by State Legislative Districts, 2012–14

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Background and purpose

Variations in health by geographic region are commonly reported, with such reports commonly using counties as the geographic unit of analysis. However, within Washington state, counties vary widely by population size, and this can hamper comparative assessments: In the more populous counties, such as King, Pierce and Snohomish, the various communities contained within each county (e.g., rich, poor, healthy and not) become muddled together, and the differences among these subcounty communities are subsequently masked. For less populous counties, such as Columbia, Garfield and Wahkiakum, the number of people is so small that the rates become highly unstable, often with wide confidence intervals, making them difficult to use for comparative purposes. Moreover, while county boundaries were not initially drawn in a random fashion, the rationales for those boundaries are often arcane and idiosyncratic, and are not necessarily reflective of the communities today.

Legislative districts, in contrast, are all similar in population size and yet large enough to generate relatively stable rates. Since 1991, these district boundaries have been updated every 10 years by a nonpartisan commission with the goal of making sure that “to the extent possible, boundaries of cities, counties, neighborhoods and communities that have common interests are respected, and their division minimized¹.” Each district also has three elected officials, one in the state Senate and two in the state House of Representatives, who have an interest in the health and well-being of the constituents represented. For these reasons, we have chosen state legislative districts as our unit of analysis in this report on assessing geographic variations in health.

Health measures assessed

In this assessment, we report the 10 leading causes of death in Washington state, using age-adjusted rates for deaths from 2012 to 2014 combined. Ninety-five percent confidence intervals were also generated for these rates, and districts whose confidence intervals do not overlap with the state’s confidence intervals rates were considered to have rates either significantly higher than or lower than the state’s rates.

In rank order, from highest to lowest, the 10 leading causes of death between 2012 and 2014 were cancer, heart disease, Alzheimer’s disease, chronic obstructive pulmonary disease (COPD), unintentional injury, stroke, diabetes, suicide, chronic liver disease, and influenza and pneumonia combined. For some of these leading causes, we assessed subcategories of the disease or cause. Hence for cancer, we included separate assessments of lung cancer, breast cancer, prostate cancer and colorectal cancer. Similarly with heart disease, we assessed the subset, coronary heart disease (CAD). For unintentional injuries, we included an assessment of unintentional poisoning and motor vehicle crashes. And finally, for suicide, we separately assessed firearm suicides. In all these instances, the subcategories assessed were a major component of the broader disease category or condition in which they were contained.

¹ Washington State Redistricting Commission <http://www.redistricting.wa.gov/faq.asp>

In this assessment, we have also included life expectancy by legislative district. This summary measure takes into account the age-specific death rates in each district and uses those rates in determining the average life expectancy within each district if those age-specific rates remained constant. This measure is not intended to be predictive of any one individual's actual life expectancy.

Age-adjusted rates for all causes of death were also assessed by district. As with life expectancy, this measure provides the broadest indicator of potential disparity by legislative district.

Finally, we included two derived measures: one on smoking-attributable causes of deaths and another on deaths that potentially could have been preventable had there been access to appropriate health care services. This latter category is commonly referred to as health care amenable deaths. The rates for these, too, are age-adjusted, and the specific definitions and proportions of ICD-10 causes of death used in these two measures — as well as the ICD-10 codes used in all the other measures — can be found in the Appendix.

A one-page summary and a matrix of each measure assessed by legislative district precede this report's main body, showing their ranking (higher, no different or lower) relative to the state.

Summary of Findings

Four districts — the 3rd, 19th, 29th and 30th — had 11 or more of the 22 measures that were significantly higher or, in the case of life expectancy, shorter than the statewide measures. For all four districts, these included the two major summary measures — life expectancy and all deaths; the two derived measures — smoking attributable deaths and health care amenable deaths; plus all cancers and lung cancer, all heart disease, chronic obstructive pulmonary disease (COPD) and diabetes. The 19th district had the most measures that were higher or shorter than the state, 19. The 3rd was second with 14 poor measures. The 29th had 13. Lastly, the 30th had 11.

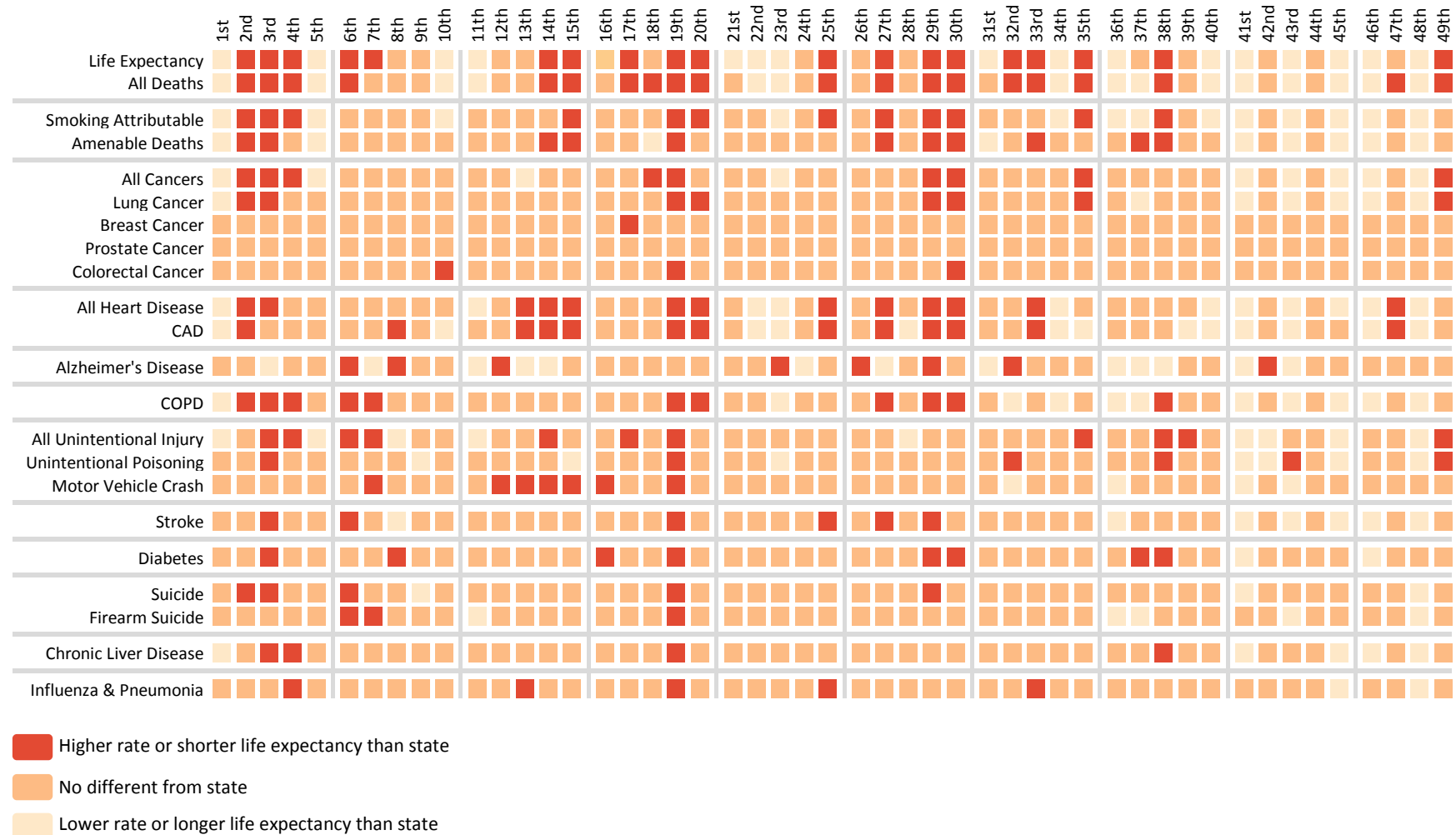
In addition to those measures listed above, the 19th also had higher rates for CAD; all unintentional injuries as well as unintentional poisonings and motor vehicle crashes (MVC); stroke; all suicides and firearm suicides; chronic liver disease; and influenza and pneumonia. The 3rd, too, also had higher rates for all unintentional injuries plus unintentional poisonings; stroke; all suicides; and chronic liver disease. The 29th had higher rates for CAD; Alzheimer's; stroke; and all suicides. And the 30th also had a higher rate for CAD.

In contrast, the 41st district had 17 measures that were better than the state's. The 48th had 16. The 43rd and the 45th each had 13, and the 46th had 12. Measures for these five districts were better than the state's for life expectancy; all deaths; smoking-attributable deaths; health care amenable deaths; all cancers; lung cancer; heart disease; COPD; and stroke.

The 41st district also had significantly lower rates than the state's for CAD; Alzheimer's; all unintentional injuries plus unintentional poisonings and MVC; diabetes; all suicides; and chronic liver disease. Rates in the 48th were lower than the state's for CAD; all unintentional injuries and unintentional poisonings; all suicides and firearm suicide; chronic liver disease; and influenza and pneumonia.

The 43rd also had lower rates for CAD; Alzheimer's; MVC; and firearm suicide. The 45th also had lower rates for all unintentional injuries and unintentional poisonings; chronic liver disease; and influenza and pneumonia. Lastly, the 46th had lower rates for CAD; all unintentional injuries and unintentional poisonings; all suicides and firearm suicides; chronic liver disease; and influenza and pneumonia.

Summary of measures



Variations in Life Expectancy and Mortality Rates by State Legislative Districts, 2012–14

Life Expectancy by State Legislative Districts

2012–14 combined

While life expectancy is not an actual predictor of how long a person will live, it is a useful summary measure of a population's overall longevity based upon its age-specific death rates. In that context, the average life expectancy (LE) for Washingtonians born between 2012 and 2014 is 80.4 years.

Among the 49 legislative districts, 19 have a LE that is significantly shorter than the state's and 16 have a LE that is significantly longer. There is an 8.4 year difference in LE between the district with the shortest LE and the one with the longest.

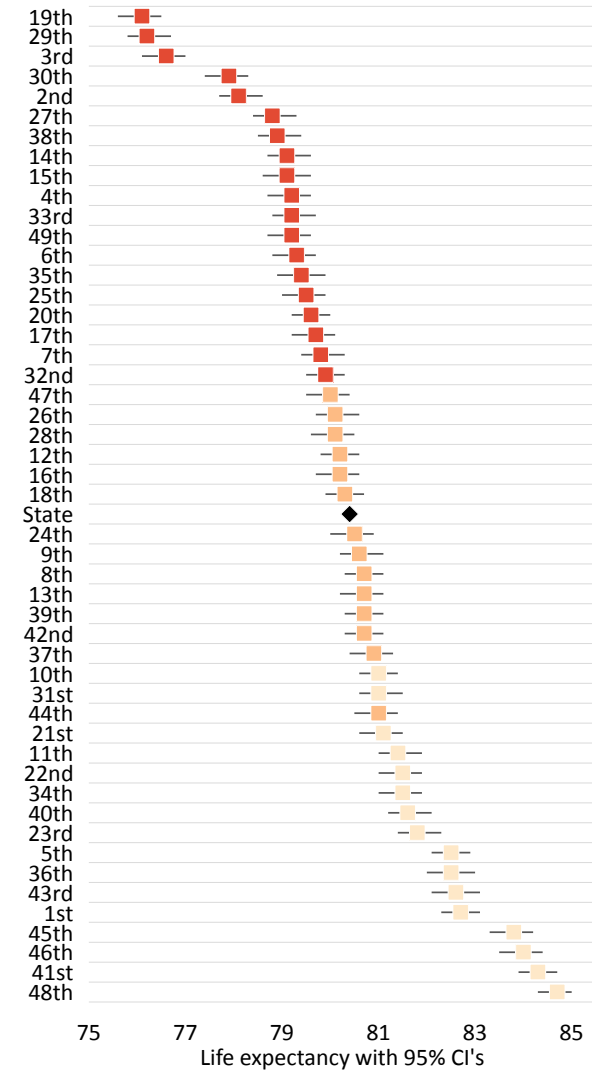
Shortest are the 19th, 29th and 3rd districts with LEs of 76.1, 76.2 and 76.6, respectively. These three districts' LEs are significantly shorter than the state's and all other legislative districts' LEs.

Longest are the 48th, 41st, 46th and 45th districts with LEs of 84.7, 84.3, 84.0 and 83.8, respectively. These districts' LEs are significantly longer than the state's and all other legislative districts' LEs.

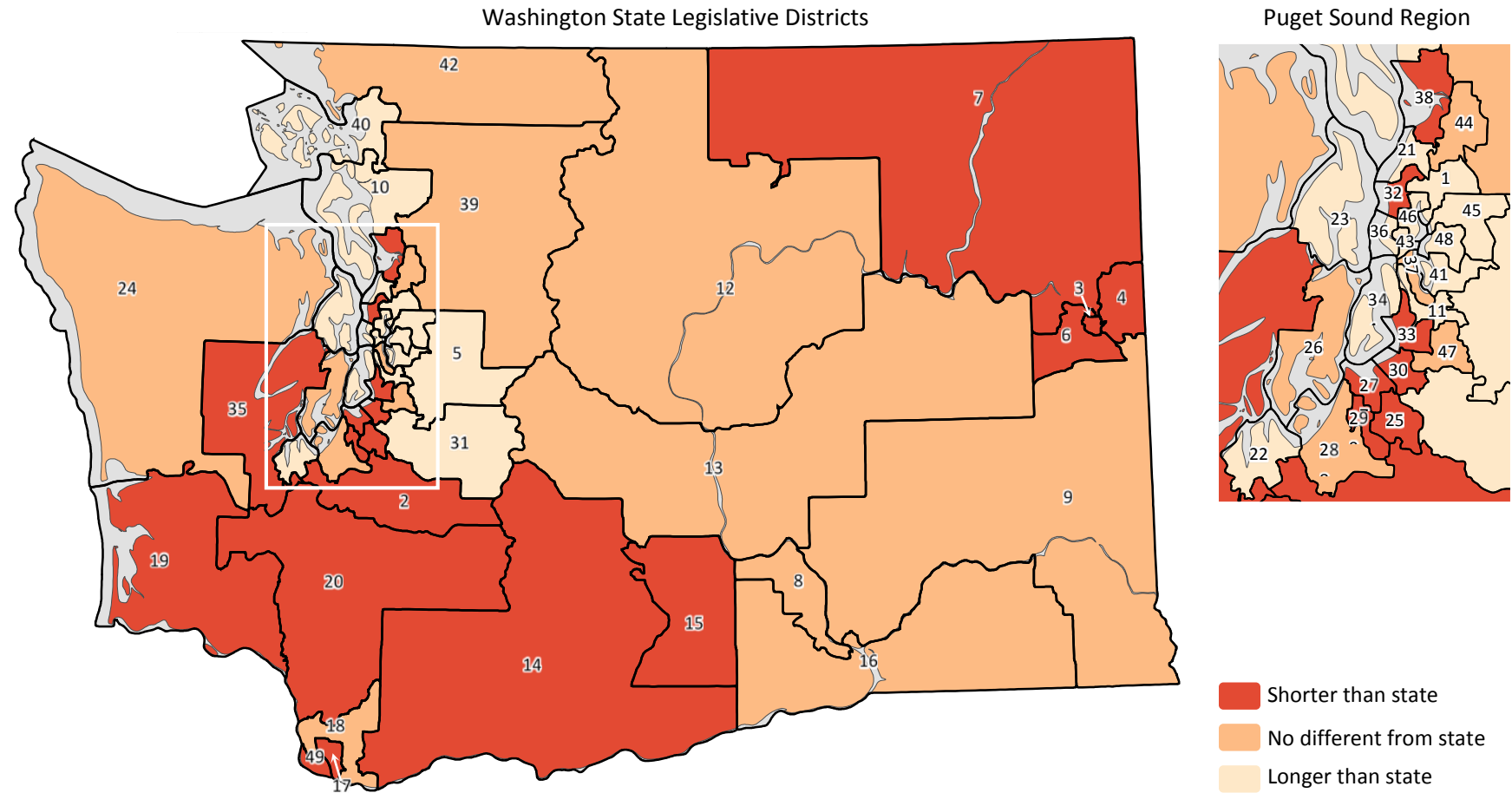
Shorter LEs are seen in the Spokane, Tacoma and Everett environs, as well as in the southern coastal, south central and northeastern regions of the state.

Longer LEs are seen in the Lake Washington environs, and within and around Island and San Juan counties.

Life expectancy ranked shortest to longest by district



Life Expectancy by State Legislative Districts
2012–14 combined



All Causes Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Among Washington residents, there were 153,130 deaths from all causes between 2012 and 2014, averaging 51,043 per year. Of that total, there is enough information from 150,306 (98 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 670.9 per 100,000.

Among the 49 districts, 20 have a rate significantly higher than the state's and 15 have a rate that is lower. There is nearly a two-fold difference between the district with the highest rate and the district with the lowest.

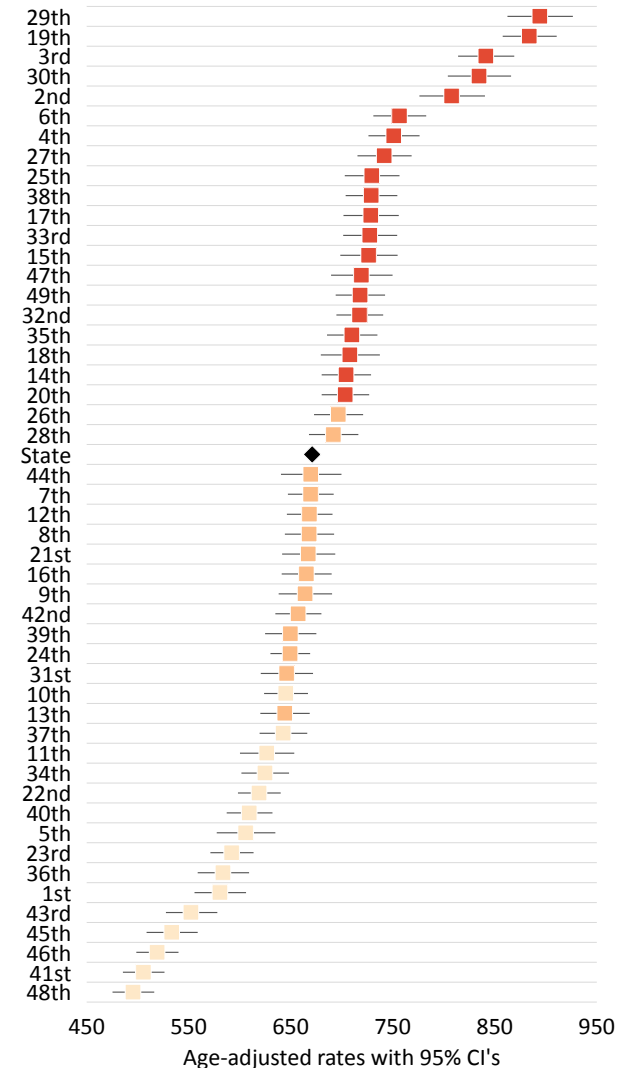
The highest rates are seen in the 29th and the 19th districts with age-adjusted rates per 100,000 persons of 894.0 and 883.7, respectively. These two districts' rates are significantly higher than all other districts except the 3rd and the 30th districts, whose rates are 841.1 and 834.4, respectively.

The lowest rates are seen in the 48th, 41st and 46th districts with rates of 495.3, 505.5 and 518.9, respectively. These three districts' rates are significantly lower than all other districts except the 43rd and the 1st, whose rates are 552.1 and 580.4, respectively.

Higher rates are generally seen in the southwest and south central sectors of the state as well as in the Tacoma, Everett and Spokane city environs.

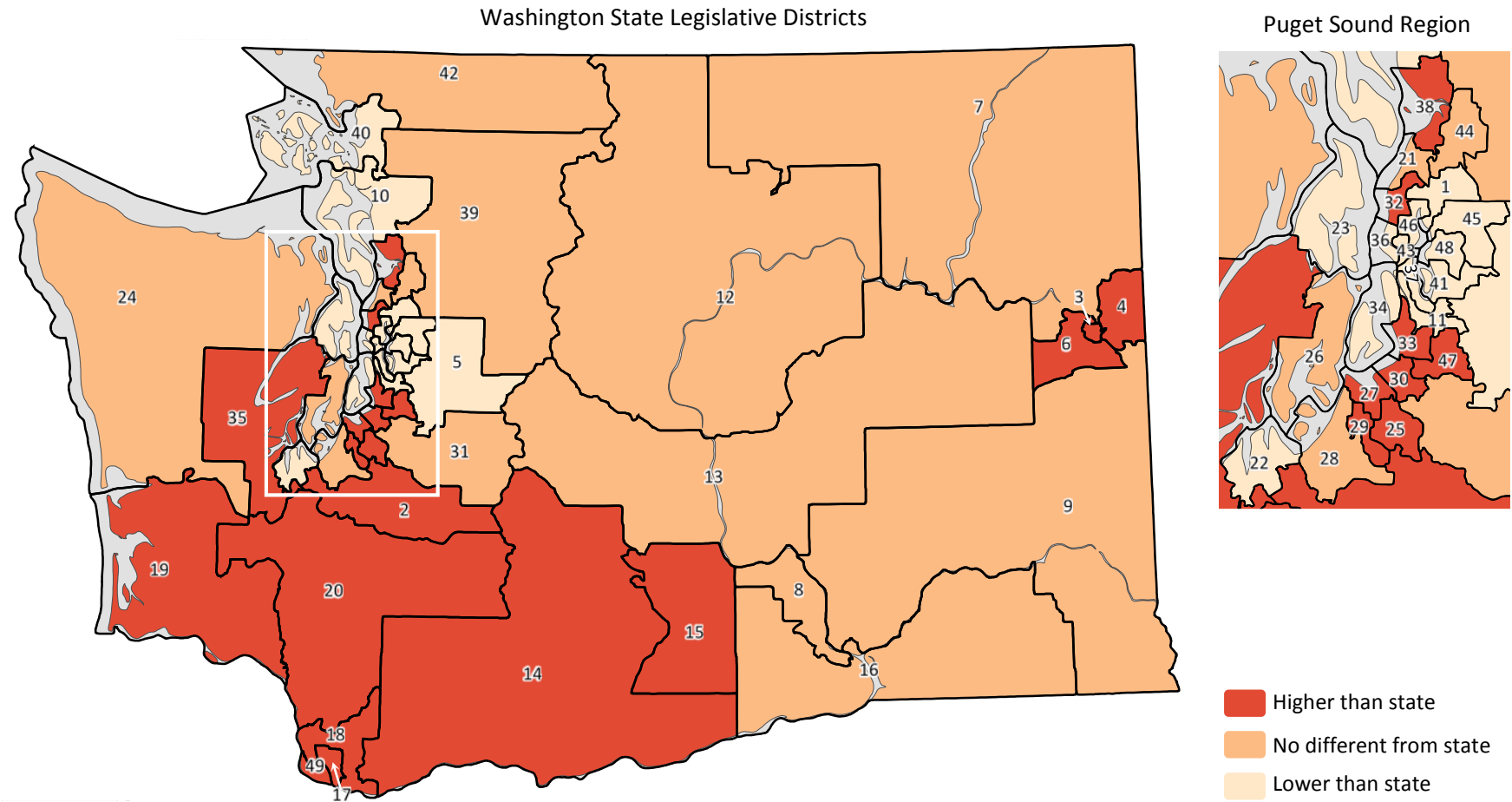
Lower rates are generally seen in the Lake Washington, eastern King county and Olympia environs, as well as the central and northern Puget Sound regions.

All Causes mortality rate ranked highest to lowest by district



All Causes Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Smoking Attributable Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Using the Centers for Disease Control and Prevention smoking-attributable fractions (SAF) of deaths for 19 diseases by age and gender,* there were 21,882 deaths among Washington residents between 2012 and 2014 that are attributable to smoking. Based upon those SAFs, the statewide age-adjusted rate for smoking-attributable mortality is 96.9 per 100,000 persons.

Among the 49 districts, 12 have a rate significantly higher than the state's and 13 have a rate that is lower. There is a two-and-a-half-fold difference between the district with the highest rate and the district with the lowest.

Since by definition these deaths are attributable to cigarette smoking, they are all potentially preventable.

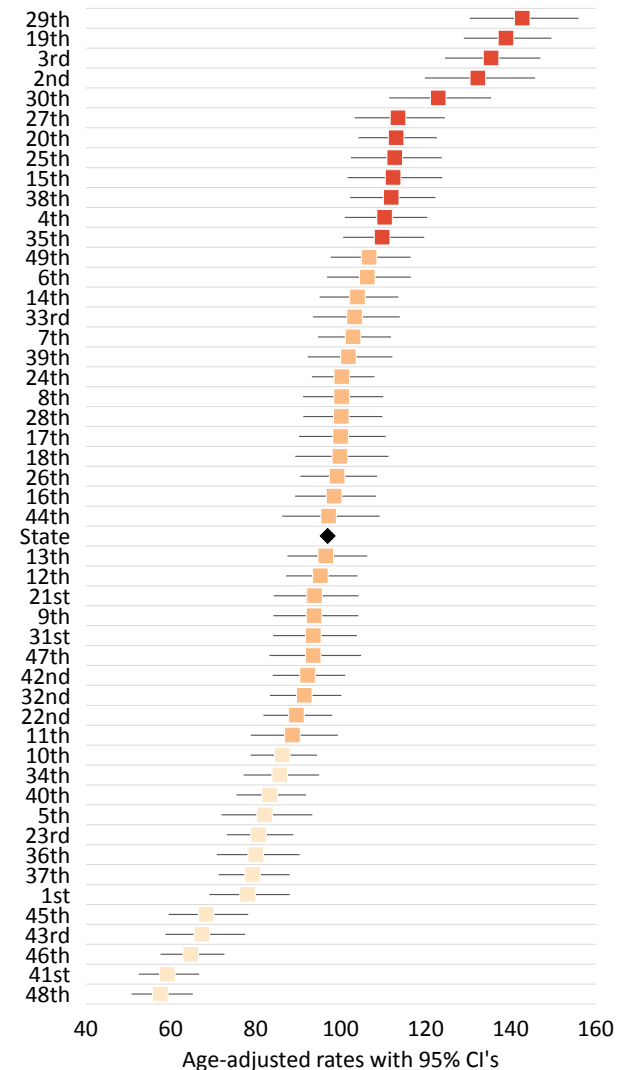
The highest rates are seen in the 29th, 19th and 3rd districts with age-adjusted rates per 100,000 persons of 142.7, 138.8 and 135.3, respectively. These three districts' rates are significantly higher than all other districts except the 2nd and the 30th, whose rates are 135.3 and 132.2, respectively.

The lowest rates are seen in the 48th and 41st districts with rates of 57.5 and 59.2, respectively. These two districts' rates are significantly lower than all other districts except the 43rd and the 45th, whose rates are 67.3 and 68.3, respectively.

Higher rates are generally seen in the Hood Canal and southwest sectors of the state as well as in the Tacoma, Everett and Spokane city environs.

Lower rates are generally seen in the Lake Washington and eastern King county environs, as well as the central and northern Puget Sound regions.

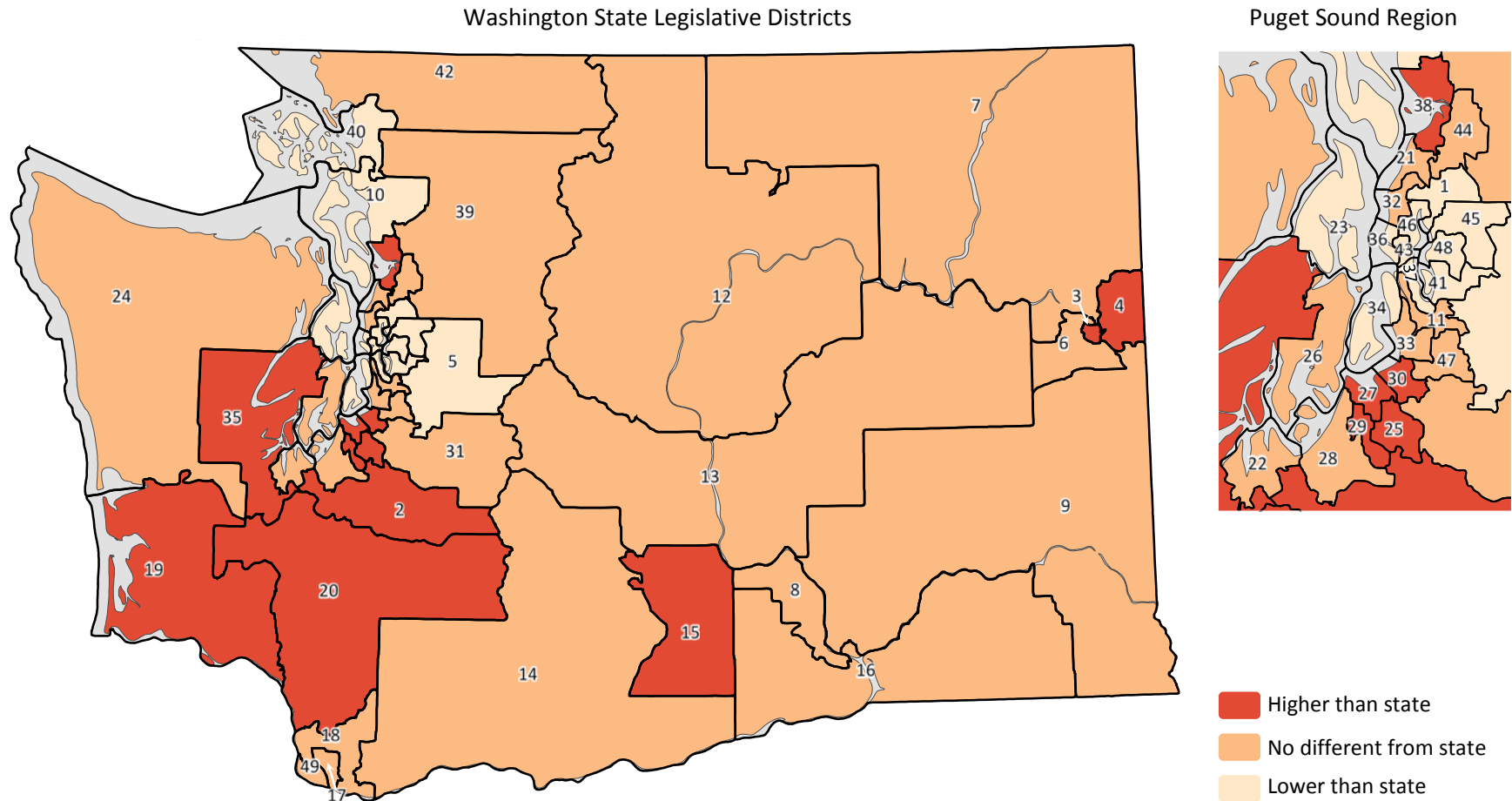
Smoking Attributable mortality rate ranked highest to lowest by district



<https://chronicdata.cdc.gov/Health-Consequences-and-Costs/Smoking-Attributable-Mortality-Morbidity-and-Econo/w47j-r23n>

Smoking Attributable Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012-14 combined



Health Care Amenable Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Among Washington residents, there were 12,875 deaths between 2012 and 2014 that were potentially preventable, given appropriate access to health care services. Such deaths are generally referred to as health care amenable deaths.* The statewide age-adjusted rate for these deaths is 53.2 per 100,000 persons.

Among the 49 districts, 11 have a rate significantly higher than the state's and nine have a rate that is lower. There is a 3.4-fold difference between the district with the highest rate and the district with the lowest.

The highest rates are seen in the 29th and 19th districts with age-adjusted rates per 100,000 persons of 97.0 and 81.8, respectively. The 29th district's rate is significantly higher than all other districts except the 19th.

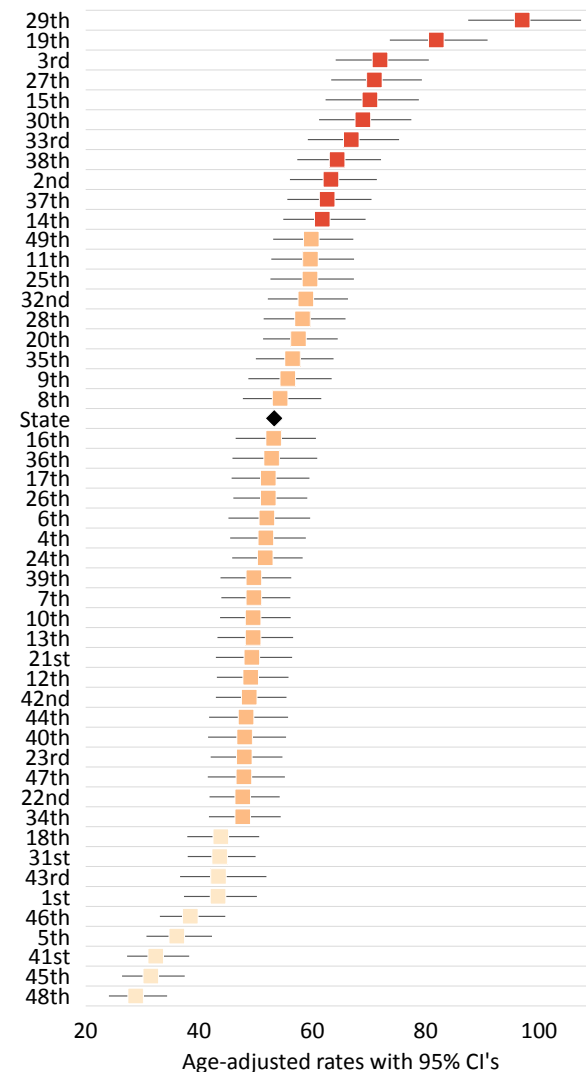
The lowest rates are seen in the 48th, 45th and 41st districts with rates of 28.8, 31.5 and 32.3, respectively. These districts' rates are significantly lower than all other districts except the 5th, 46th and 1st, whose rates are 36.0, 38.5 and 43.3, respectively.

Higher rates are generally seen along the Interstate-5 corridor from Lakewood to south Seattle; in rural Pierce, Pacific and Wahkiakum counties; in Everett and the city of Spokane; and in the south central region surrounding Yakima.

Lower rates are generally seen in the Lake Washington region and in the eastern King county and northern Pierce environs.

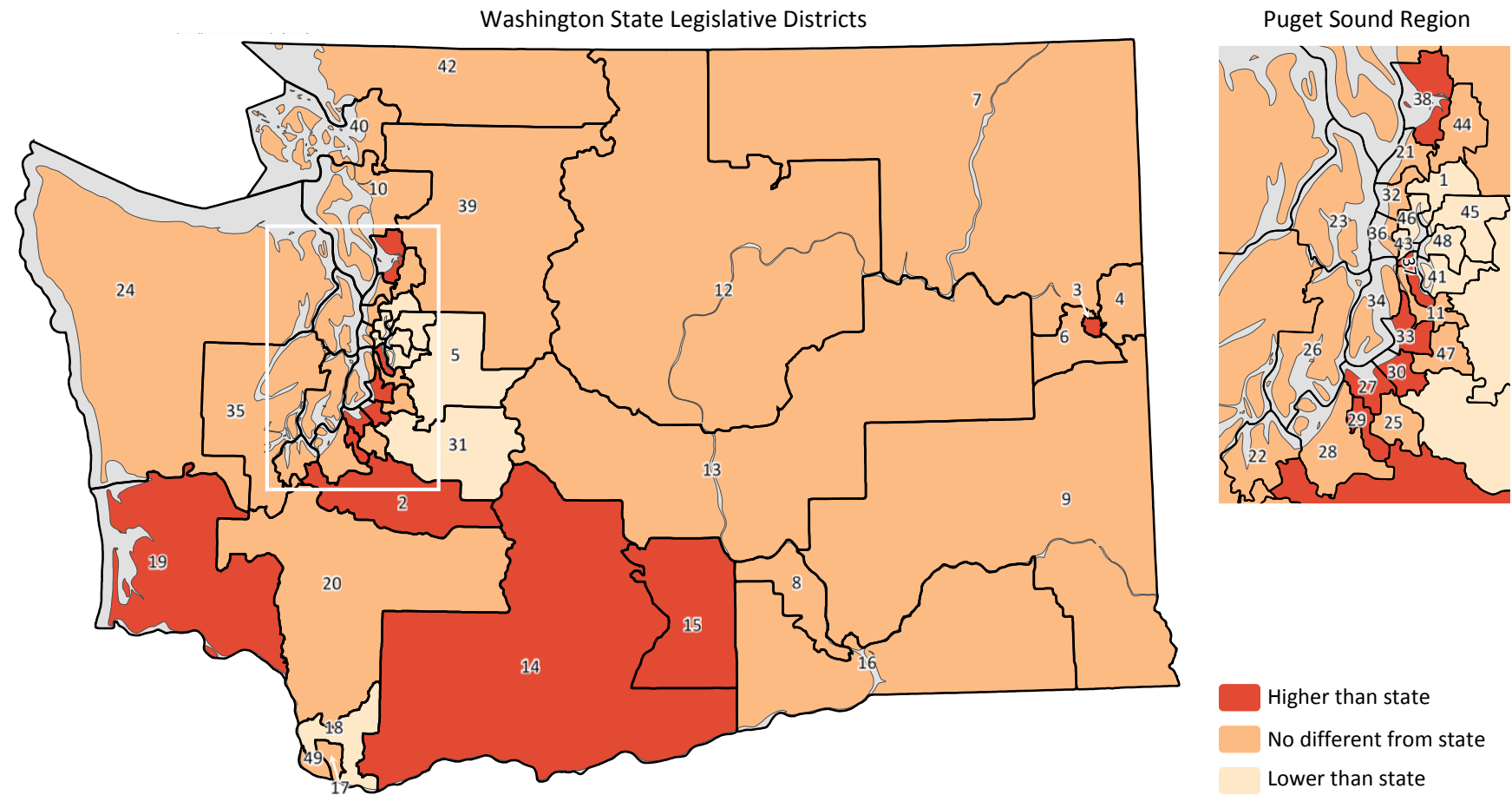
* <http://content.healthaffairs.org/content/31/9/2114.full>

Health Care Amenable mortality rate ranked highest to lowest by district



Health Care Amenable Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Cancer Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Cancer includes a diverse set of diseases which, when taken as a whole, makes it the leading cause of death among Washington residents, totaling 35,937 deaths from 2012 to 2014 and averaging 11,979 per year. Among those deaths, there is enough information from 35,476 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 156.9 per 100,000 persons.

Among the 49 districts, nine have a rate significantly higher than the state's and nine have a rate that is significantly lower. There is a 1.6-fold difference between the district with the highest rate and the district with the lowest.

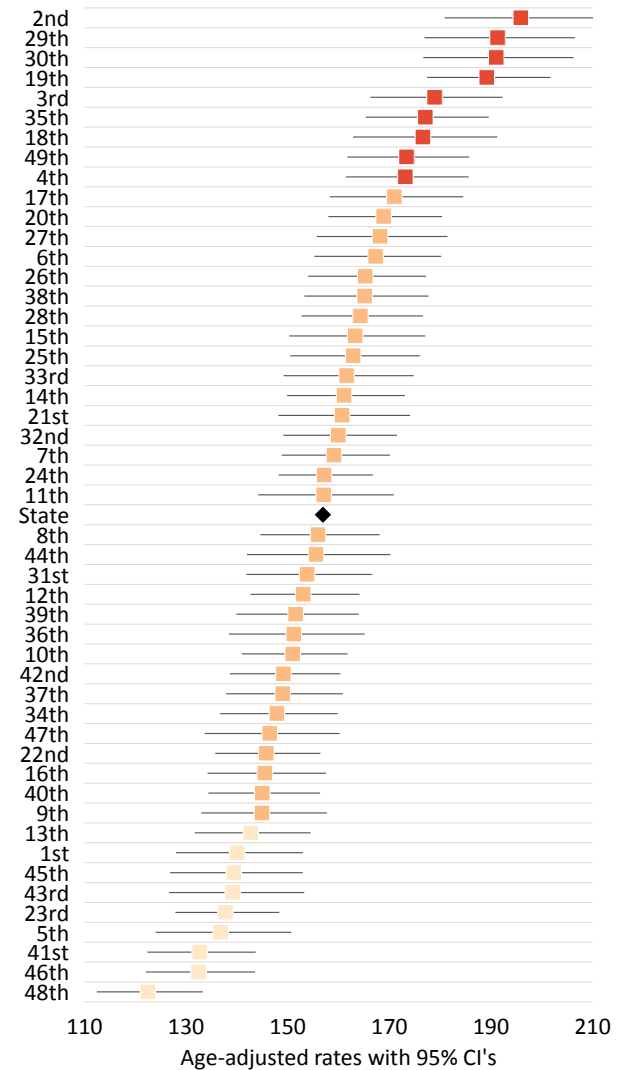
The highest rates are seen in the 2nd, 29th, 30th and 19th districts with age-adjusted rates per 100,000 persons of 195.8, 191.2, 191.0 and 189.1, respectively.

The lowest rates are seen in the 48th, 46th and 41st districts with rates of 122.4, 132.4 and 132.6, respectively.

Higher rates are generally seen along the Hood Canal and south coastal and rural Pierce regions, as well as the south Tacoma, Federal Way, Vancouver and Spokane city environs.

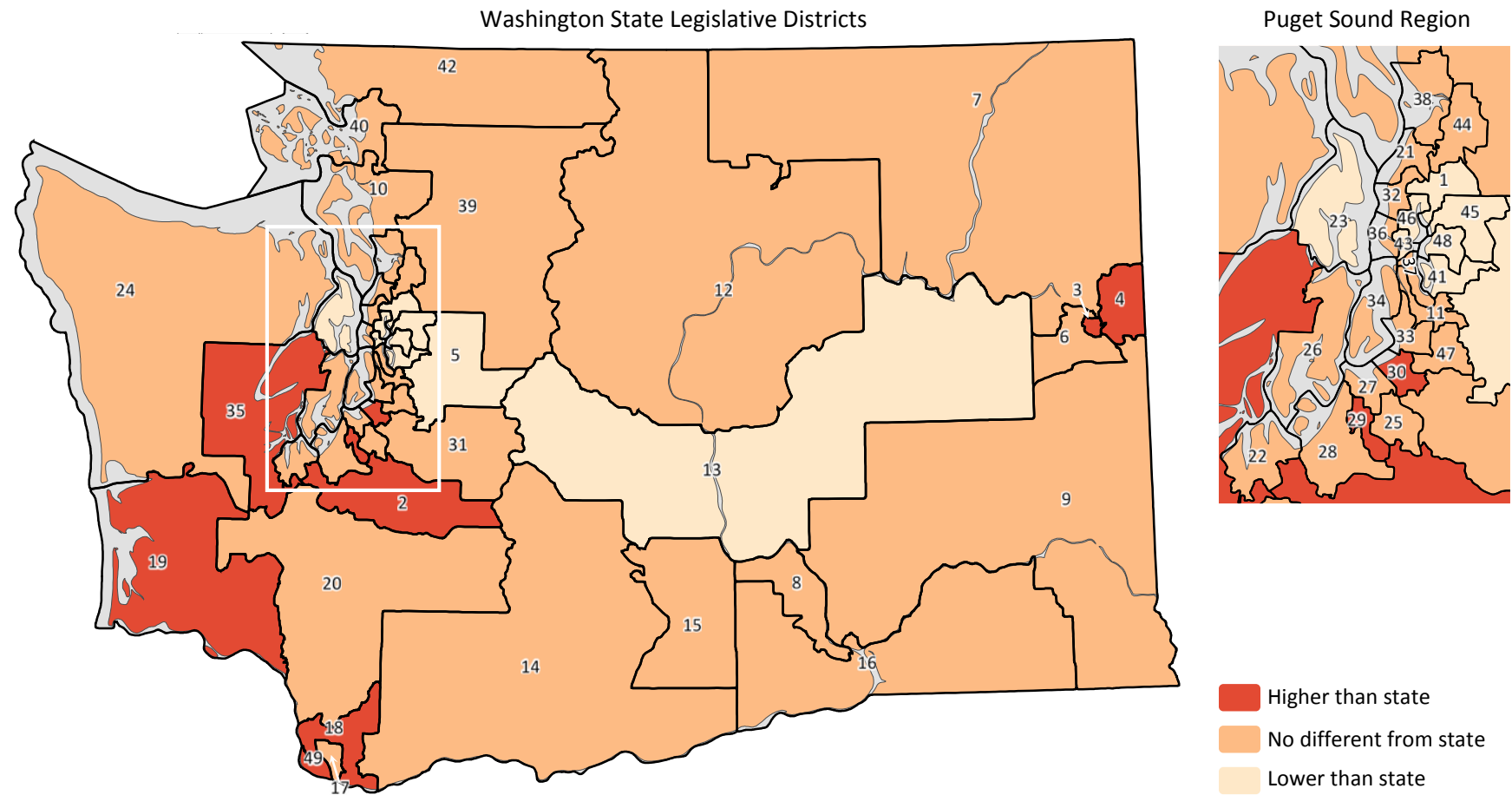
Lower rates are generally seen on the Kitsap peninsula and in the Lake Washington region, and eastward through most of Kittitas, Grant and Lincoln counties.

Cancer mortality rate ranked highest to lowest by district



Cancer Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Lung Cancer Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Lung cancer is the leading cause of cancer deaths. From 2012 to 2014, there were 9,149 Washington residents who died from lung cancer, for an average of 3,050 per year. Among those years' deaths, there is enough information from 9,034 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 40.2 per 100,000 persons.

Among the 49 districts, nine have a rate significantly higher than the state's and seven have a rate that is lower. There is a two-and-a-half-fold difference between the district with the highest rate and the district with the lowest.

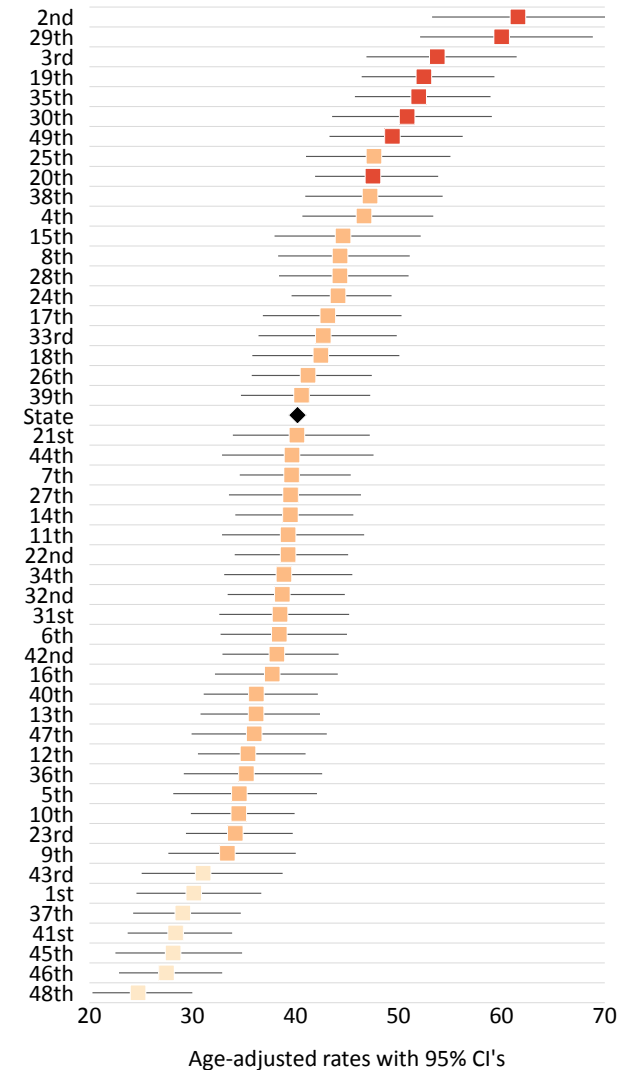
Because lung cancer is largely caused by cigarette smoking, these deaths are preventable.

The highest rates are seen in the 2nd and 29th districts with age-adjusted rates per 100,000 persons of 61.6 and 60.0, respectively. Besides having the highest rate in the state, the 2nd district's rate is also significantly higher than the rates in 38 other districts.

The lowest rates are seen in the 48th, 46th and 45th districts with rates of 24.7, 27.5 and 28.1, respectively.

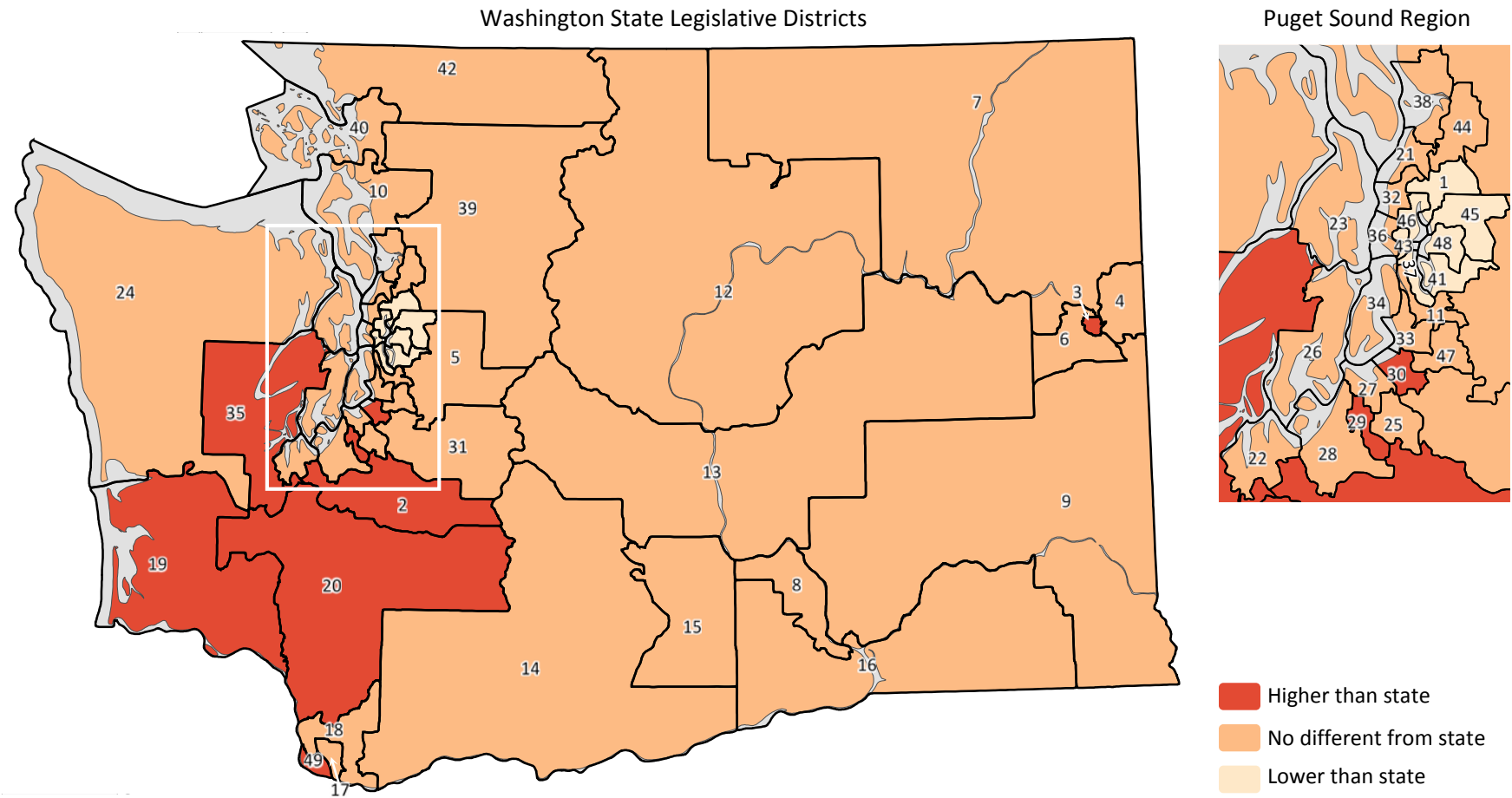
Higher rates are generally seen in the Hood Canal, south coastal and rural Pierce county regions, as well as the south Tacoma, Federal Way, Vancouver and Spokane city environs.

Lung cancer mortality rate ranked highest to lowest by district



Lung Cancer Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Female Breast Cancer Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

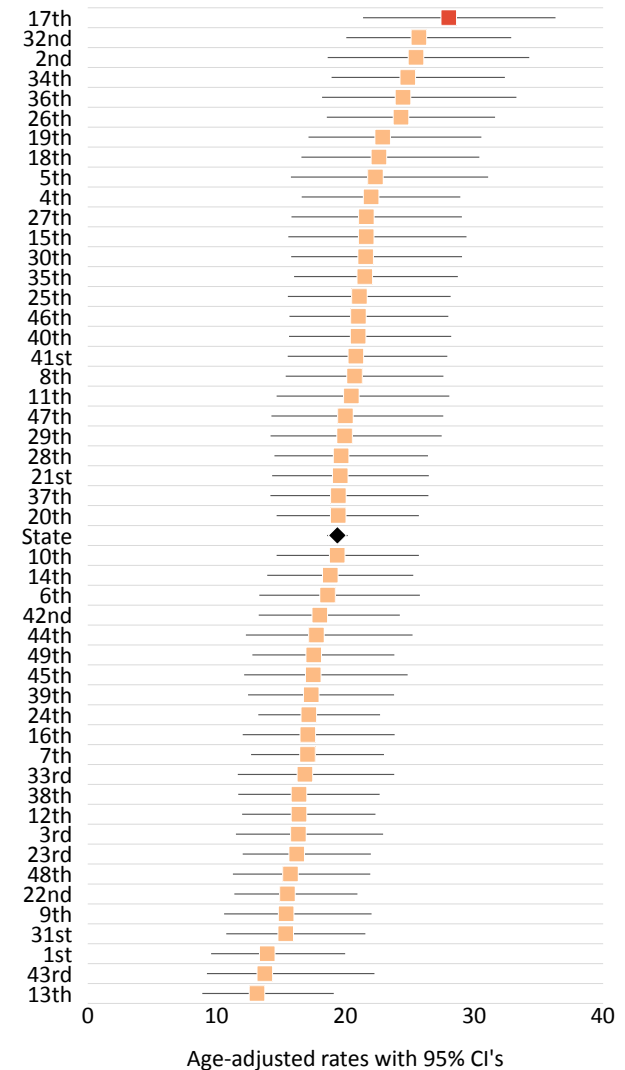
The second-leading cause of cancer deaths for women is breast cancer. From 2012 to 2014, there were 2,434 Washington women who died from breast cancer, for an average of 811 per year. Among those years' deaths, there is enough information from 2,409 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 19.4 per 100,000 persons.

Among the 49 districts, one has a rate significantly higher than the state's and none has a rate that is significantly lower. There is a two-fold difference between the district with the highest rate and the district with the lowest.

Although generally not preventable, improvements in treatment and therapies, as well as early detection through screening, have reduced female breast cancer mortalities.

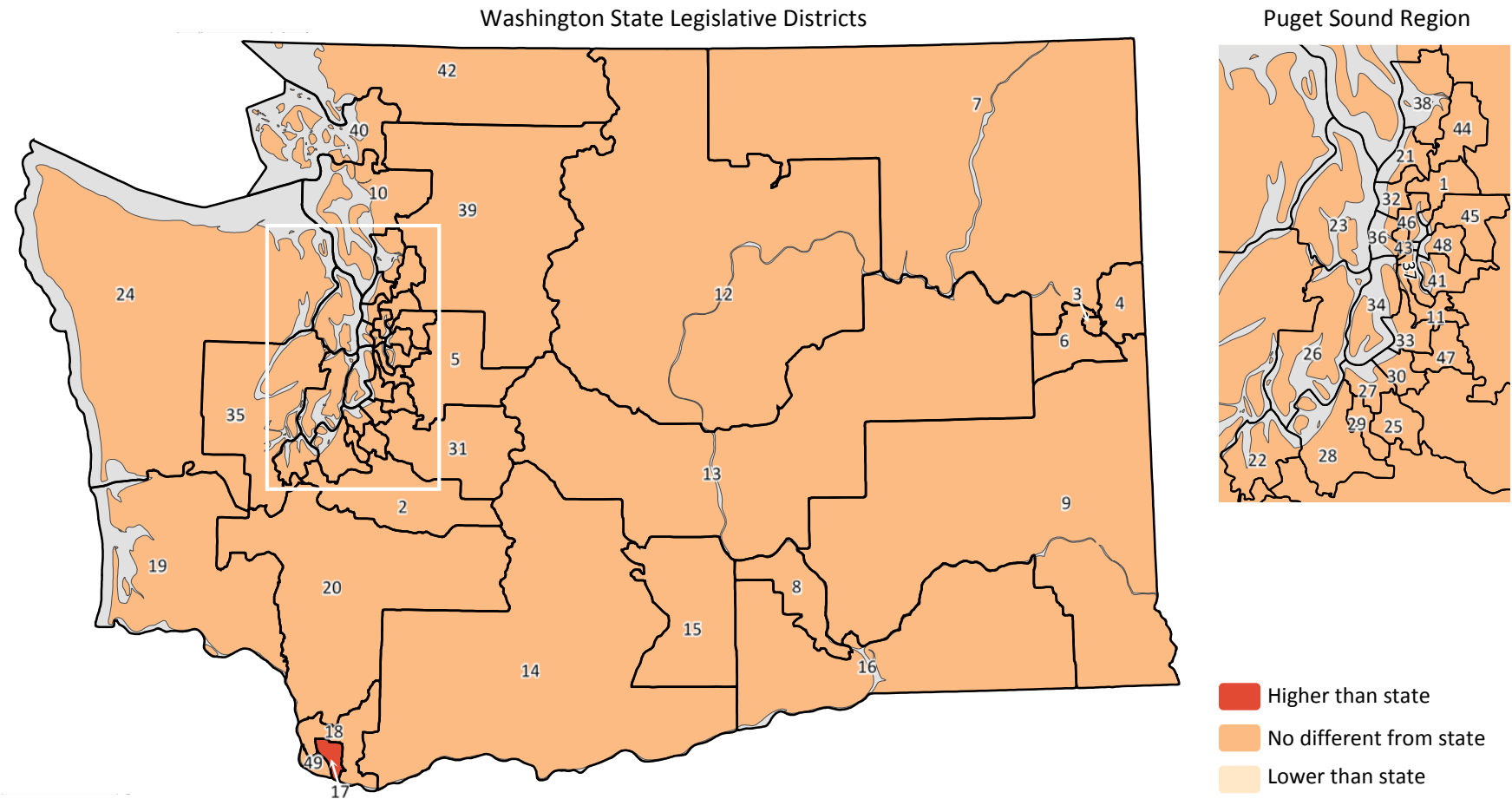
The one district with a rate significantly higher than the state's is the 17th, at 28.0 per 100,000 women.

Female breast cancer mortality rate ranked highest to lowest by district



Female Breast Cancer Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012-14 combined



Prostate Cancer Mortality Rates by State Legislative Districts

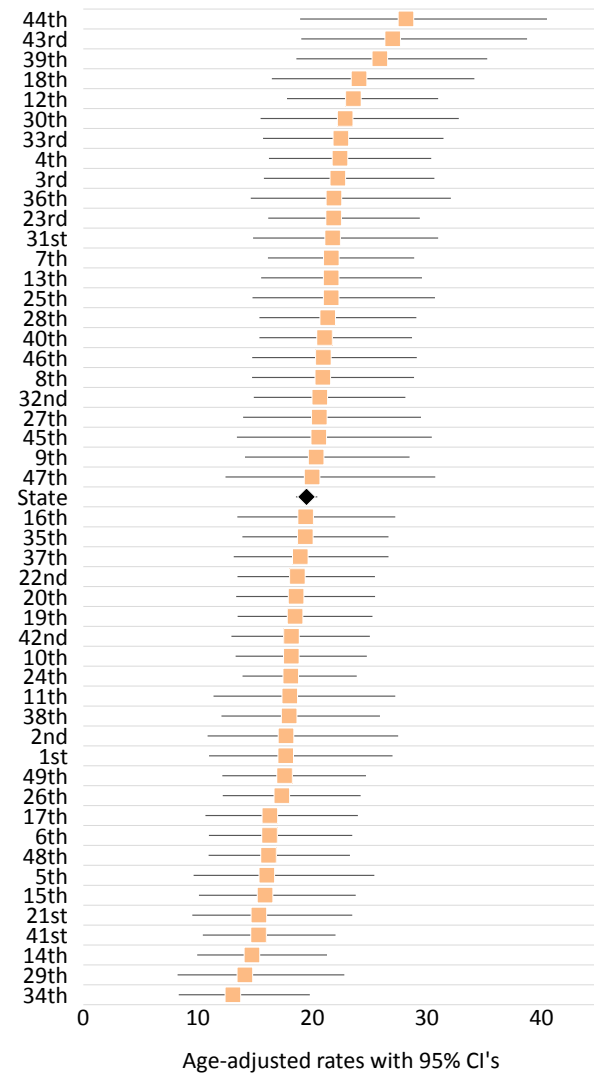
Age-adjusted per 100,000 persons, 2012–14 combined

The second-leading cause of cancer deaths for men is prostate cancer. From 2012 to 2014, there were 1,790 Washington men who died from prostate cancer, for an average of 597 per year. Among those years' deaths, there was enough information from 1,776 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 19.5 per 100,000 men.

Among the 49 districts, no districts have a rate that is significantly higher or lower than the state's rate. However, there is a two-fold difference between the district with the highest rate and the district with the lowest.

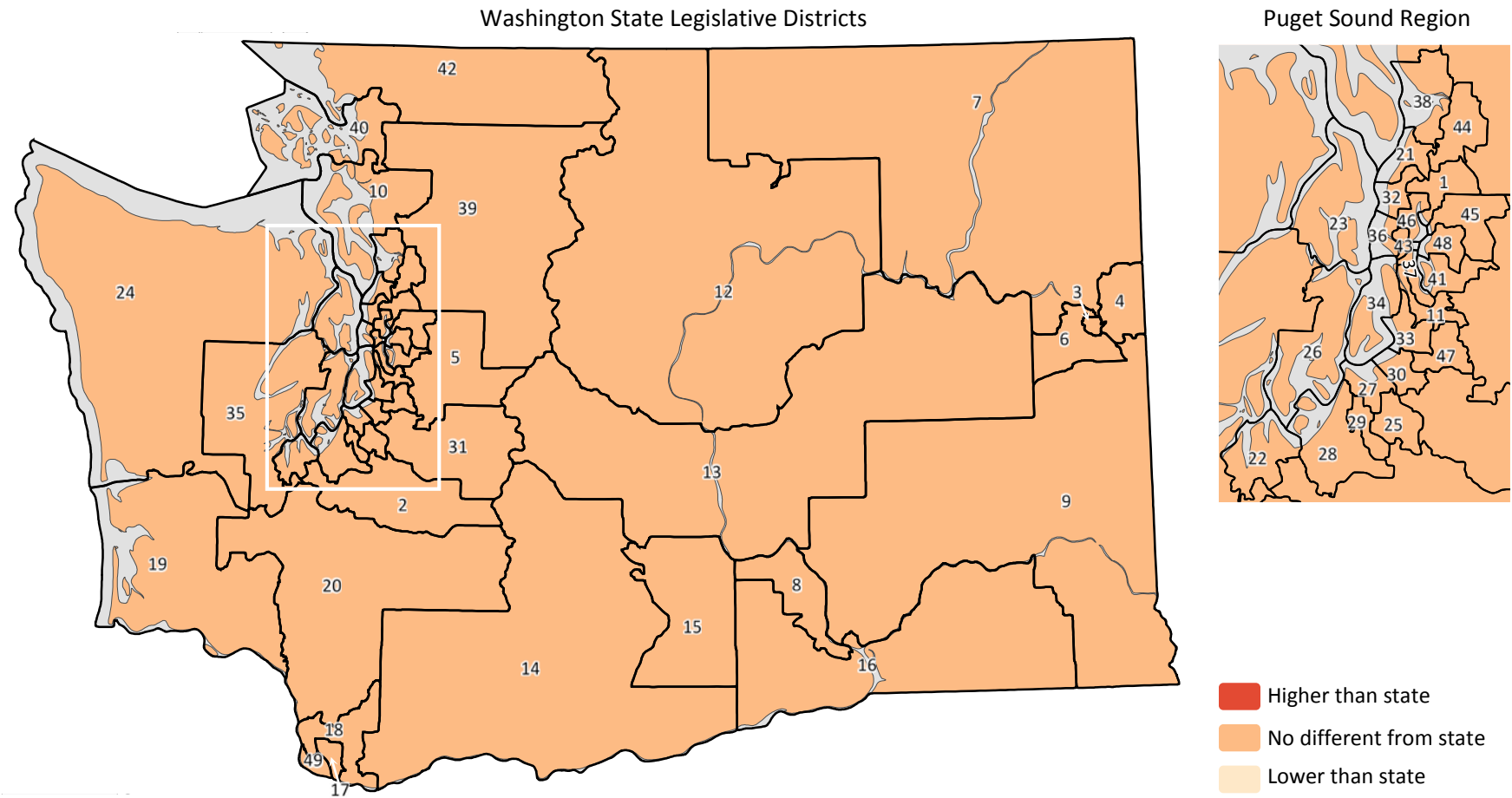
Although generally not preventable, and with screening tests of limited efficacy, prostate cancer deaths appear to be declining, perhaps due to improved medical treatments and therapies.

Prostate cancer mortality rate ranked highest to lowest by district



Prostate Cancer Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Colorectal Cancer Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Colorectal cancer is the third-leading cause of cancer deaths for both men and women. From 2012 to 2014, there were 2,899 Washington residents who died from colorectal cancer, for an average of 966 per year. Among those years' deaths, there is enough information from 2,851 (98 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 12.5 per 100,000 persons.

Among the 49 districts, three have a rate significantly higher than the state's rate and none has a rate that is lower. There is a two-fold difference between the district with the highest rate and the district with the lowest.

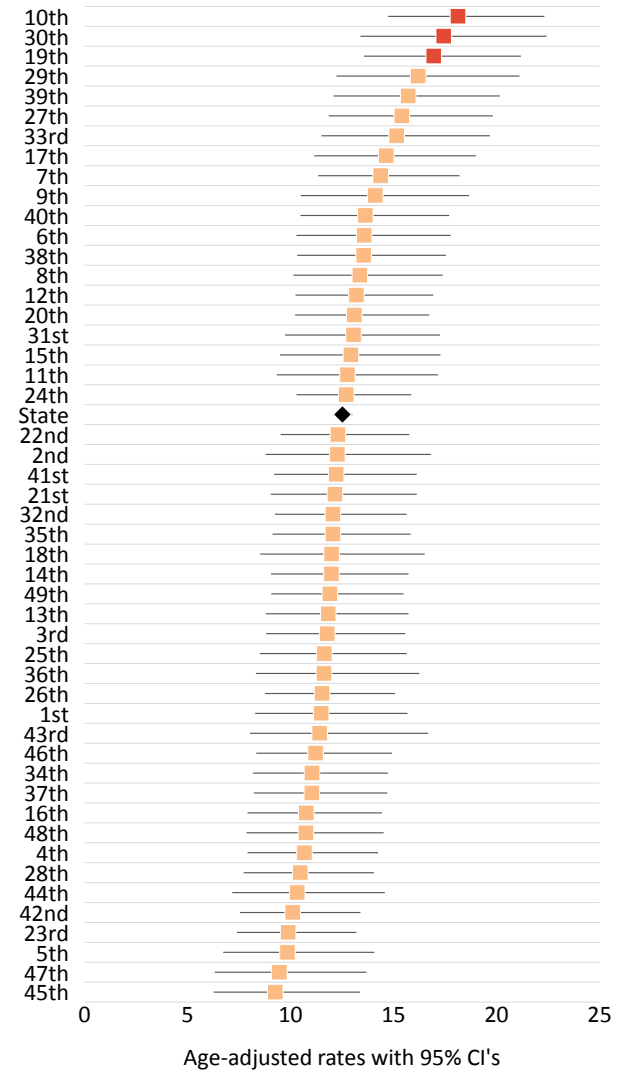
Screening for colorectal cancer can not only detect the disease at earlier stages where it can be treated more effectively, but can also be preventive through the removal of precancerous polyps.

The highest rates are seen in the 10th, 30th and 19th districts with age-adjusted rates per 100,000 of 18.1, 17.4 and 16.9, respectively.

No district had a rate that was significantly lower than the state's rate.

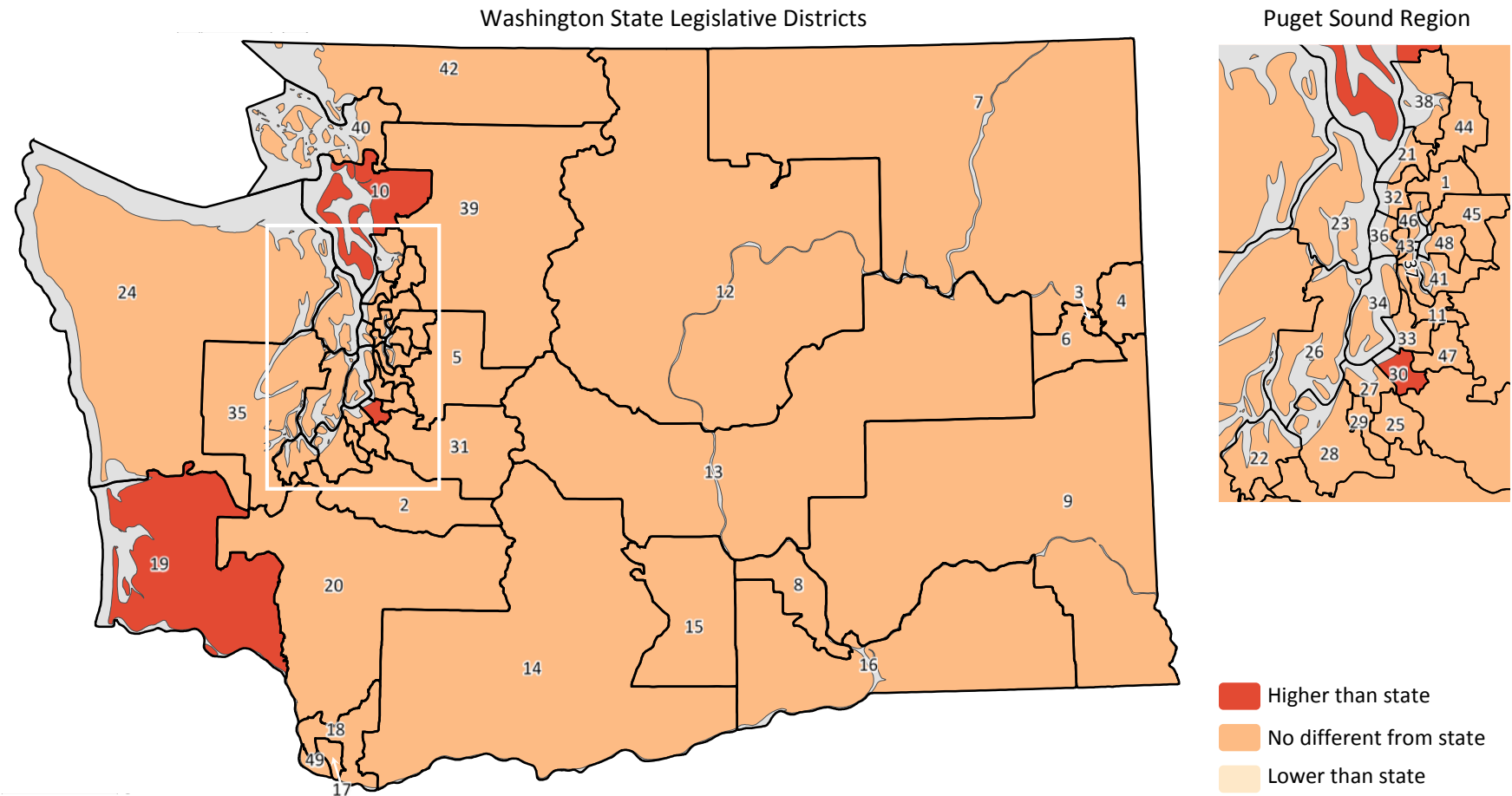
The three areas with high rates are Island County and the coastal sectors of Skagit and Snohomish counties; Pacific and Wahkiakum counties; and the environs in and around Federal Way.

Colorectal cancer mortality rate ranked highest to lowest by district



Colorectal Cancer Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012-14 combined



Heart Disease Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Heart disease is the second-leading cause of death among Washington residents, totaling 31,358 deaths from 2012 to 2014, for an average of 10,453 per year. Among those deaths, there is enough information from 30,938 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 136.7 per 100,000 persons.

Among the 49 districts, 13 have a rate significantly higher than the state's and 11 have a rate that is lower. There is a two-fold difference between the district with the highest rate and the district with the lowest.

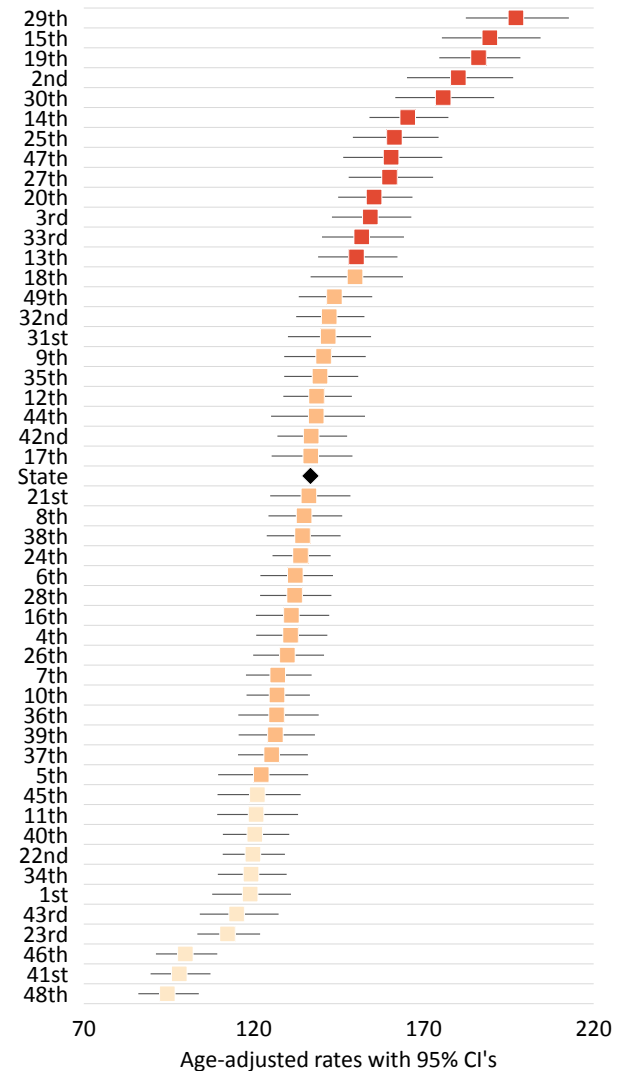
The highest rates are seen in the 29th, 15th, 19th, 2nd and 30th districts with age-adjusted rates per 100,000 persons of 197.1, 189.4, 186.1, 180.1 and 175.7, respectively. Excluding the other four districts, the rate in the 29th is significantly higher than all the other districts.

The lowest rates are seen in the 48th, 41st and 46th districts with rates of 94.5, 98.1 and 99.8, respectively. These three districts' rates are significantly lower than all the other districts except for the 23rd, 43rd 1st, whose rates are 112.2, 114.9 and 118.9, respectively.

Higher rates are generally seen in a large swath of the southwest and south central region of the state from Pacific to Lincoln counties, and in those districts along the I-5 corridor from Lakewood to SeaTac.

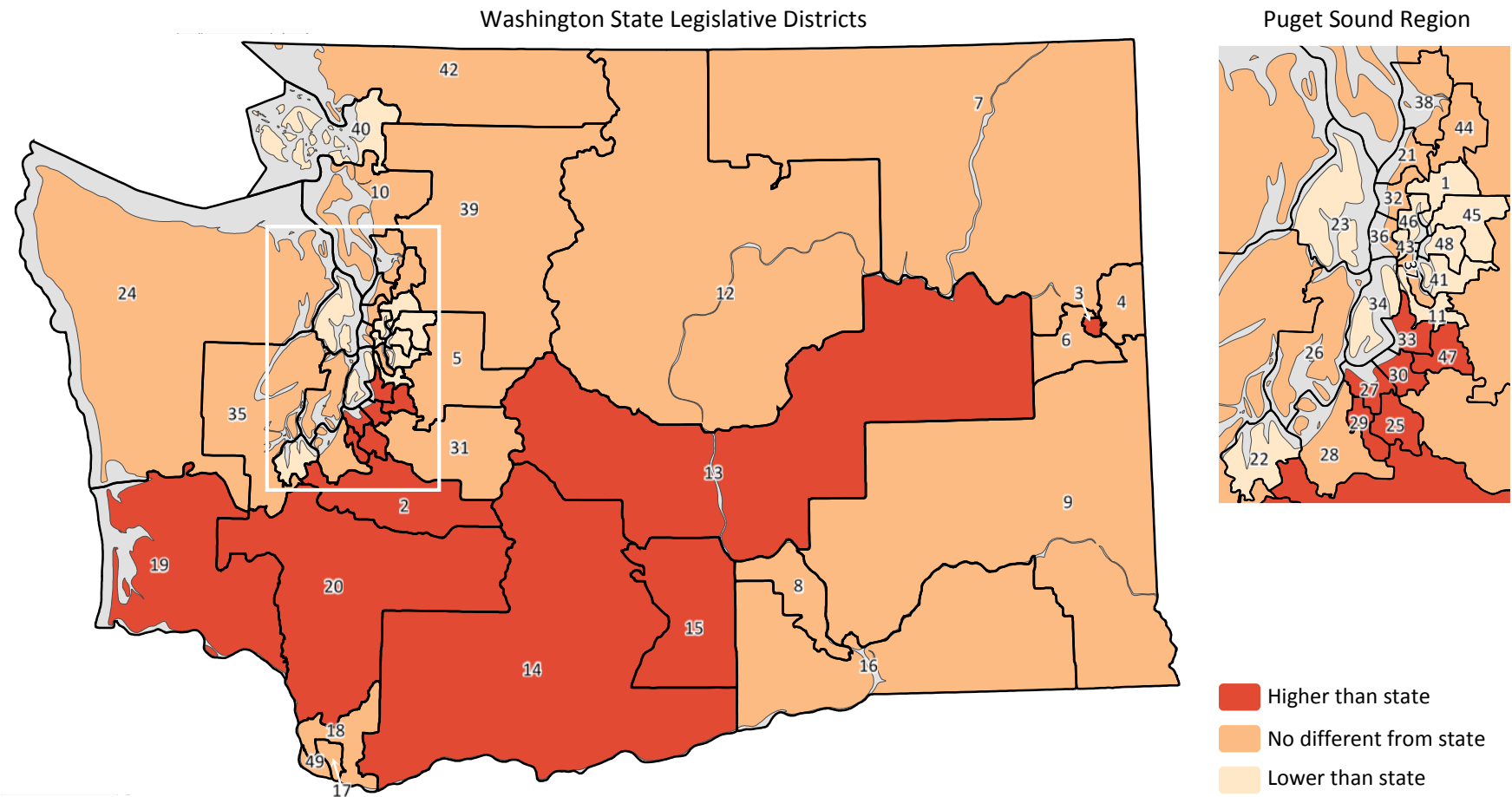
Lower rates are generally seen in the Lake Washington region, the Kitsap peninsula, Vashon Island, the Olympia environs and the San Juan Islands.

Heart disease mortality rate ranked highest to lowest by district



Heart Disease Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Coronary Artery Disease Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Coronary artery disease (CAD) is the leading cause of heart disease deaths among Washington residents, totaling 19,458 deaths from 2012 to 2014, for an average of 6,486 per year. Among those deaths, there is enough information from 19,183 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 84.7 per 100,000 persons.

Among the 49 districts, 13 have a rate significantly higher than the state's and 13 have a rate that is lower. There is a 2.6-fold difference between the district with the highest rate and the district with the lowest.

CAD may be preventable through lifestyle choices and access to appropriate preventive care services.

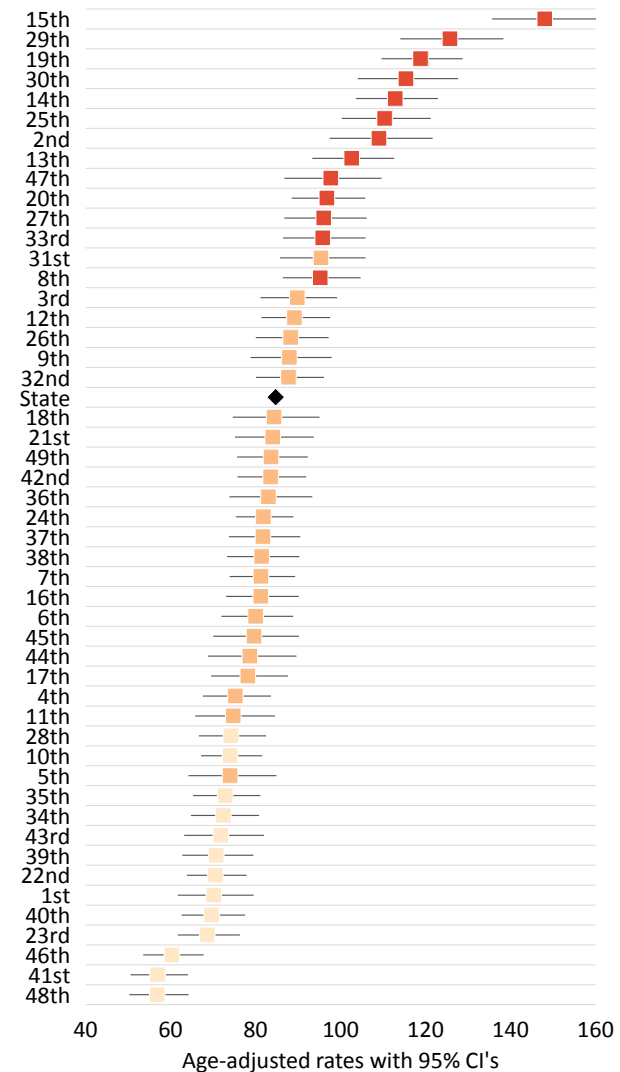
The highest rates are seen in the 15th, 29th and 19th districts with age-adjusted rates per 100,000 persons of 148.0, 125.7 and 118.8, respectively. Except for the 29th district, the rate in the 15th is significantly higher than all the other districts'.

The lowest rates are seen in the 48th, 41st and 46th districts with rates of 56.8, 56.9 and 60.3, respectively.

Higher CAD rates are generally seen in a large swath of the southwest and south central region of the state from Pacific to Lincoln counties, and in those districts along the I-5 corridor from Lakewood to SeaTac.

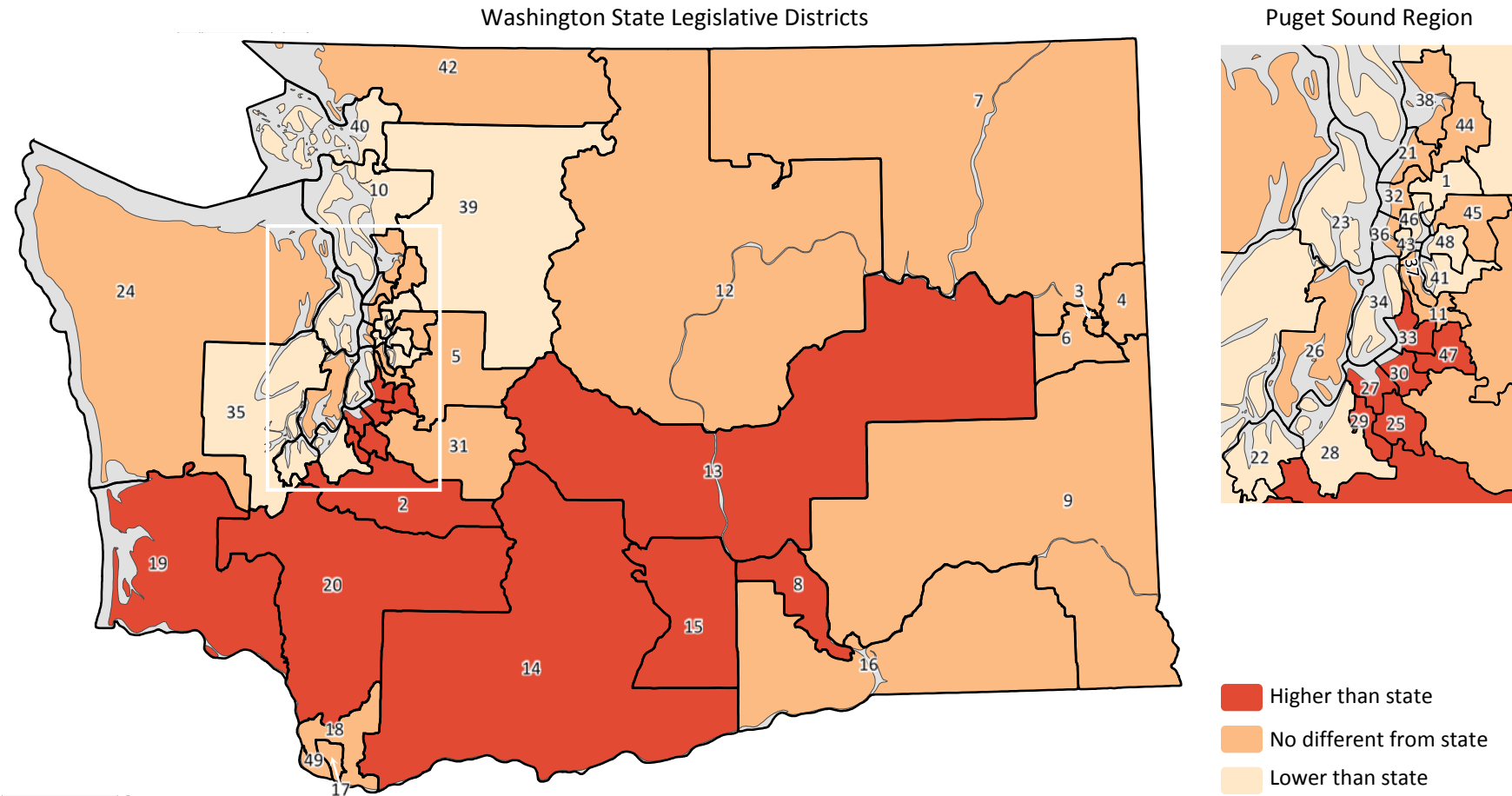
Lower rates are seen in the Lake Washington region, throughout the Puget Sound coastal region, the Hood Canal environs and most of Skagit and Snohomish counties.

Coronary artery disease mortality rate ranked highest to lowest by district



Coronary Artery Disease Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Alzheimer's Disease Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Alzheimer's disease (AD) is the third-leading cause of deaths among Washington residents, totaling 9,828 deaths from 2012 to 2014, for an average of 3,276 per year. Among those deaths, there is enough information from 9,736 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 43.5 per 100,000 persons.

Among the 49 districts, eight have a rate significantly higher than the state's and 13 have a rate that is lower. There is a 2.3-fold difference between the district with the highest rate and the district with the lowest.

AD is not preventable, and therapies are of limited efficacy.

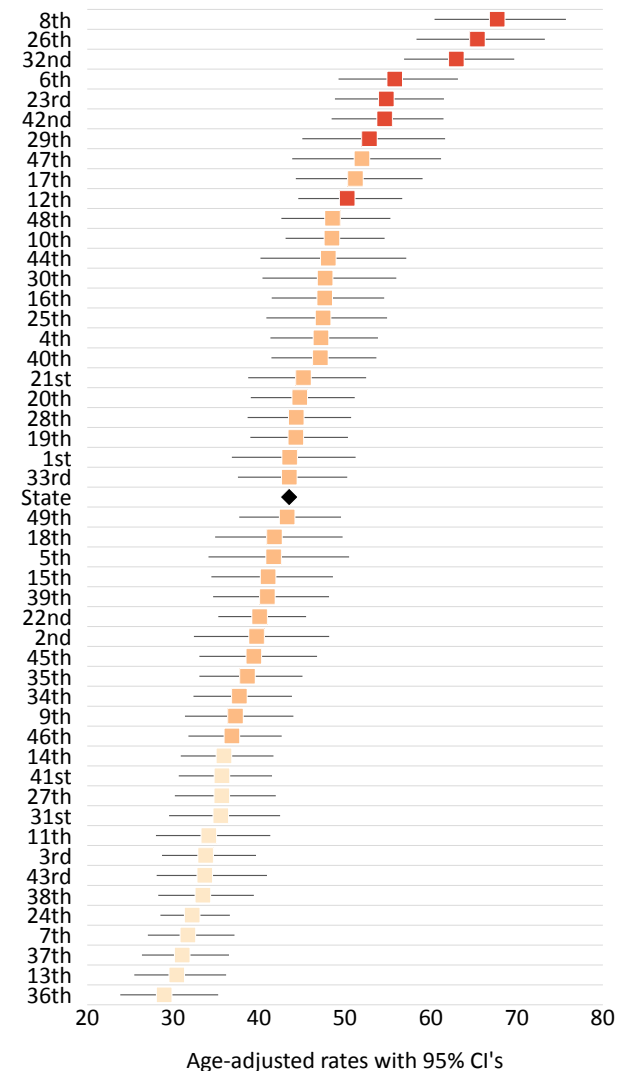
The highest rates are seen in the 8th, 26th and 32nd districts with age-adjusted rates per 100,000 persons of 67.7, 65.4 and 62.9, respectively.

The lowest rates are seen in the 36th, 13th and 37th districts with rates of 28.9, 30.4 and 31.0, respectively.

Caution is advised in assessing geographic variations in AD. Because the major risk factors for this disease — age and family history — are not modifiable and therapies for it are of limited efficacy, geographic variations may simply reflect variations in judgment when differentiating the immediate cause of death (e.g., heart disease, pneumonia, etc.) from the true underlying cause.*

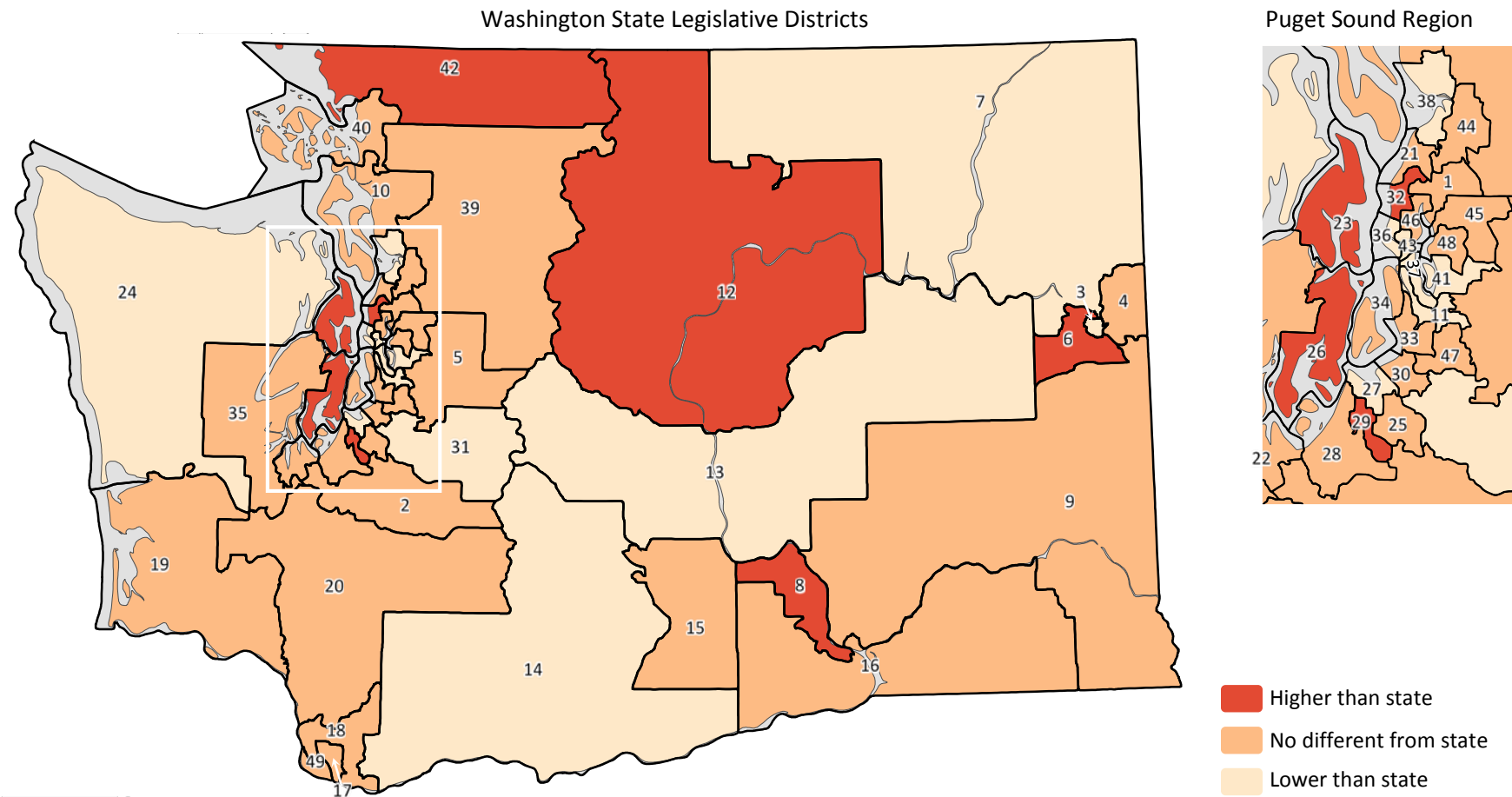
* <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3049957/>

Alzheimer's disease mortality rate ranked highest to lowest by district



Alzheimer's Disease Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



COPD Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Chronic obstructive pulmonary disease (COPD) is the fourth-leading cause of death among Washington residents, totaling 8,767 deaths from 2012 to 2014, for an average of 2,922 per year. Among those deaths, there is information from 8,663 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 39.4 per 100,000 persons.

Among the 49 districts, 11 have a rate significantly higher than the state's and 11 have a rate that is lower. There is more than a four-fold difference between the district with the highest rate and the district with the lowest.

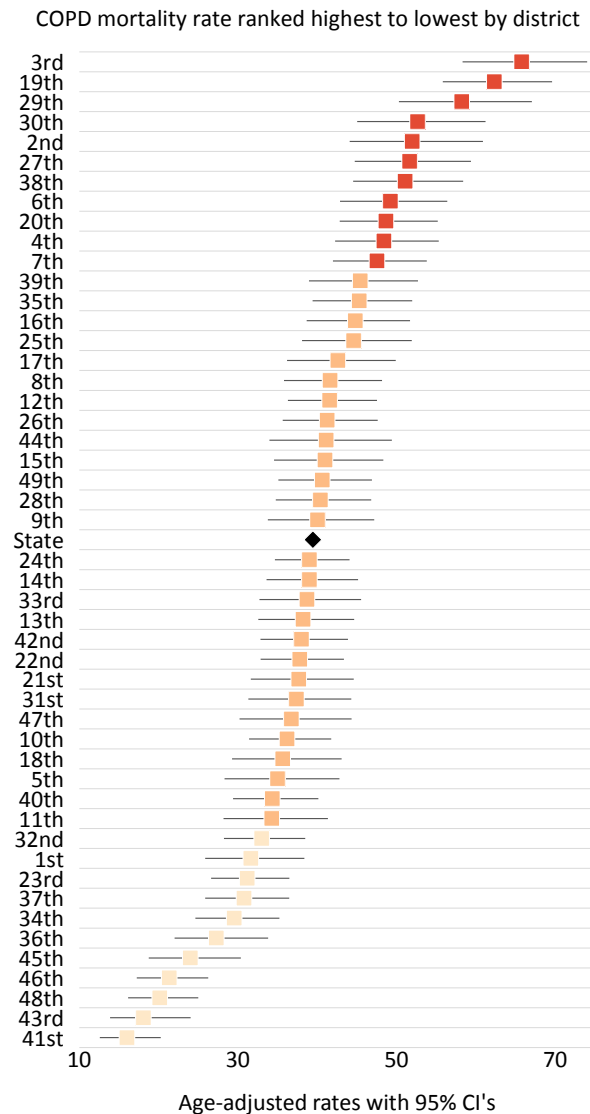
COPD is largely preventable, and the major risk factor is cigarette smoking.

The highest rates are seen in the 3rd, 19th and 29th districts with age-adjusted rates per 100,000 persons of 65.8, 62.3 and 58.2, respectively.

The lowest rates are seen in the 41st, 43rd and 48th with rates of 16.0, 18.1 and 20.1, respectively.

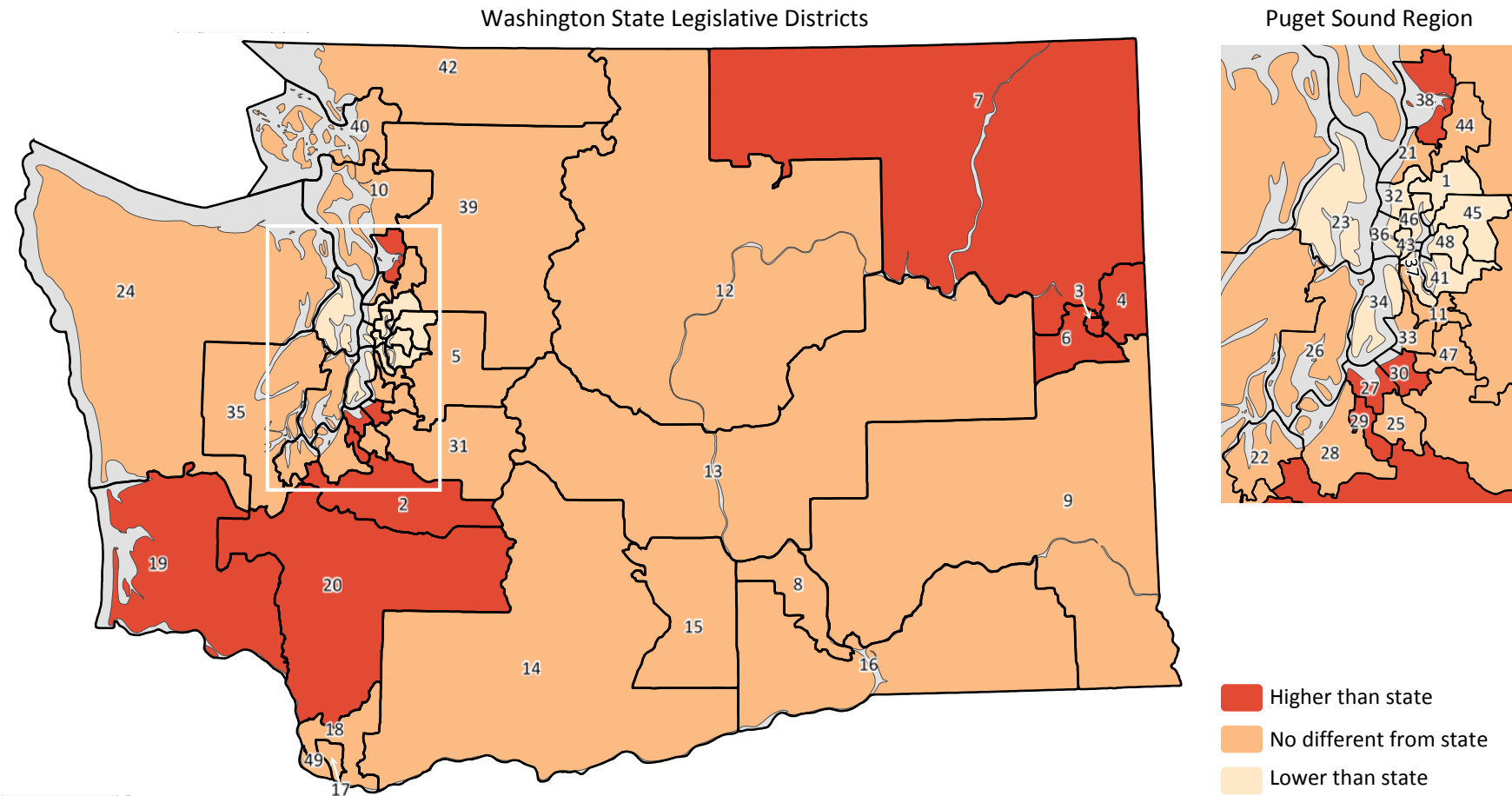
Higher rates are generally seen in the northeast and southwest corners of the state as well as in the environs in and around the cities of Tacoma and Everett.

Lower rates are generally seen in the central Puget Sound region from the Kitsap peninsula to the Lake Washington environs.



COPD Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Unintentional Injury Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Unintentional injuries are the fifth-leading cause of death among Washington residents, totaling 8,448 deaths from 2012 to 2014, for an average of 2,816 per year. Among those deaths, there is enough information from 8,176 (97 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 37.5 per 100,000 persons.

Among the 49 districts, 11 have a rate significantly higher than the state's and nine have a rate that is lower. There is a three-fold difference between the district with the highest rate and the district with the lowest.

All unintentional injuries are potentially preventable.

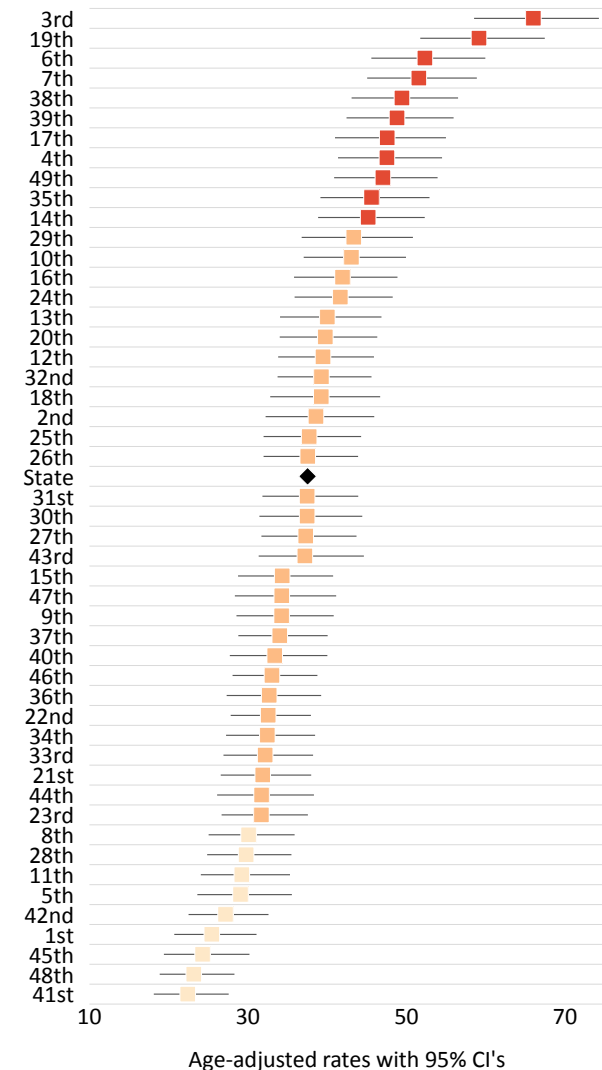
The highest rates are seen in the 3rd, 19th, 6th and 7th districts with age-adjusted rates per 100,000 persons of 66.0, 59.1, 52.3 and 51.5, respectively. Excluding the other three districts, the rate in the 3rd is significantly higher than the rates in all the districts.

The lowest rates are seen in are the 41st, 48th and 45th districts with rates of 22.4, 23.1 and 24.3, respectively.

Higher rates are generally seen in the northeast and southwest corners of the state, around Hood Canal, the south central region and rural sectors of Snohomish, Skagit and King counties as well as in the Spokane, Everett and Vancouver environs.

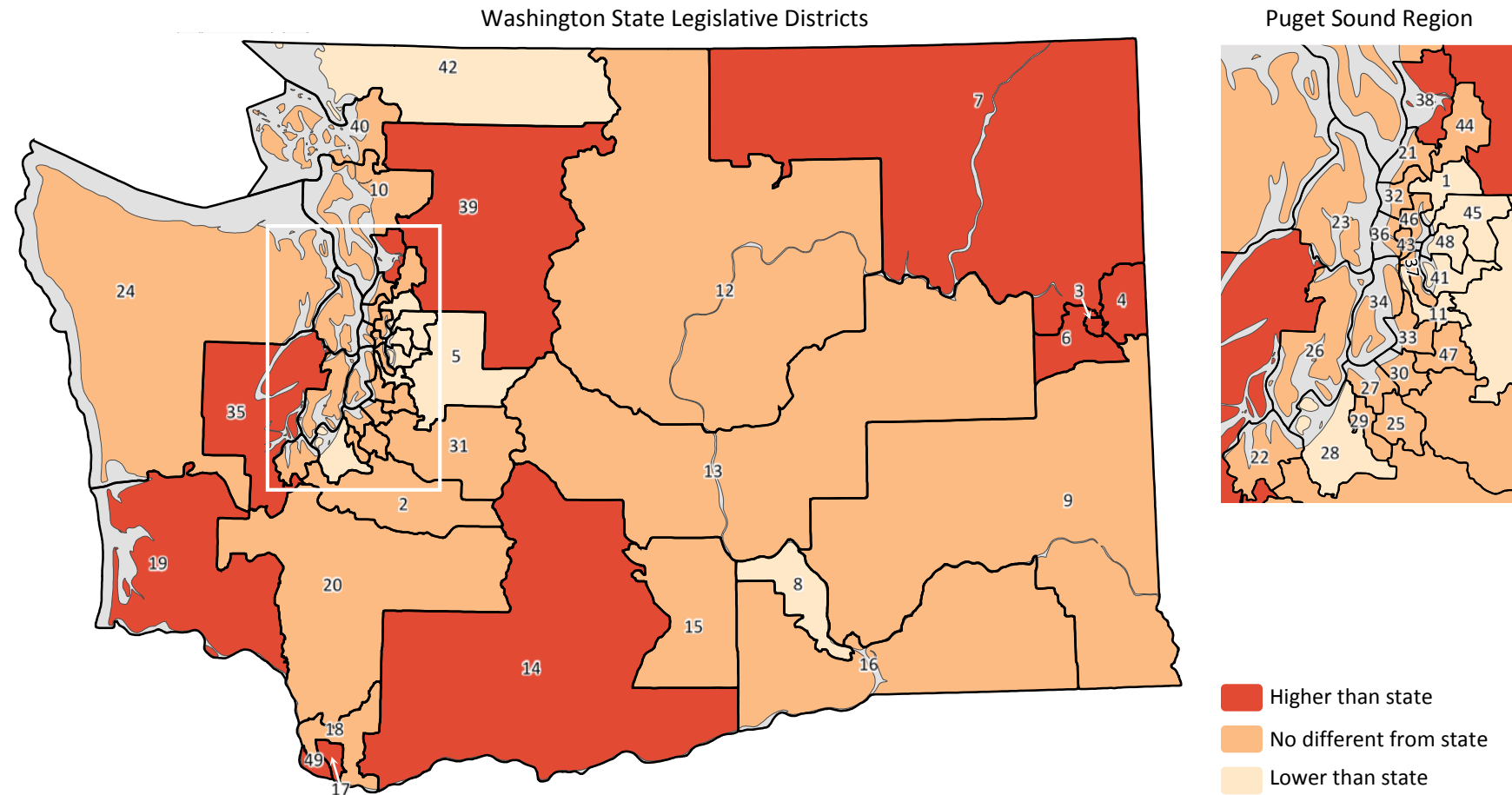
Lower rates are generally seen in the eastern Lake Washington environs and the Puget Sound coastal region of Pierce County.

Unintentional injury mortality rate ranked highest to lowest by district



Unintentional Injury Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Unintentional Poisoning Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Unintentional poisonings are the leading cause of unintentional injury deaths among Washington residents, totaling 2,560 deaths from 2012 to 2014, for an average of 853 per year. Among those deaths, there is enough information from 2,541 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 10.4 per 100,000 persons.

Among the 49 districts, six have a rate significantly higher than the state's and seven have a rate that is lower. There is a 4.5-fold difference between the district with the highest rate and the district with the lowest.

As with unintentional injuries in general, all unintentional poisonings are potentially preventable.

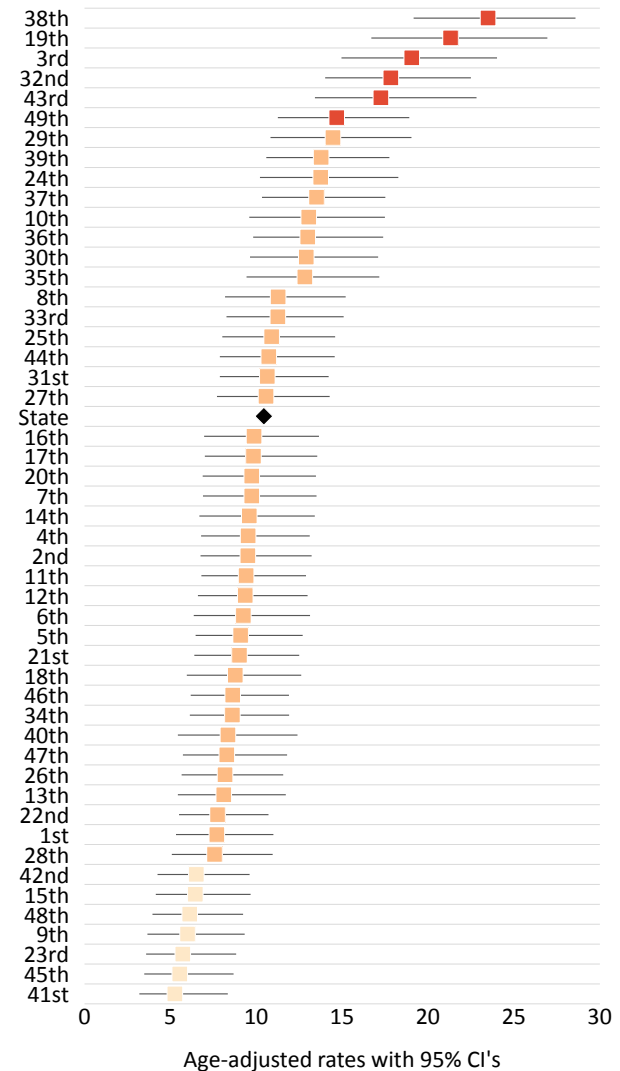
The highest rates are seen in the 38th, 19th and 3rd districts with age-adjusted rates per 100,000 persons of 23.5, 21.3 and 19.0, respectively. Excluding the other two districts, as well as the 32nd and 43rd districts, whose rates are 17.2 and 14.7, respectively, the rate in the 38th district is significantly higher than the rates in any of the remaining 44 districts.

The lowest rates are seen in the 41st, 45th and 23rd districts with rates of 5.3, 5.5 and 5.7, respectively.

Higher rates are generally seen in the Everett and Spokane city environs, downtown Seattle and in the rural southwest coastal region.

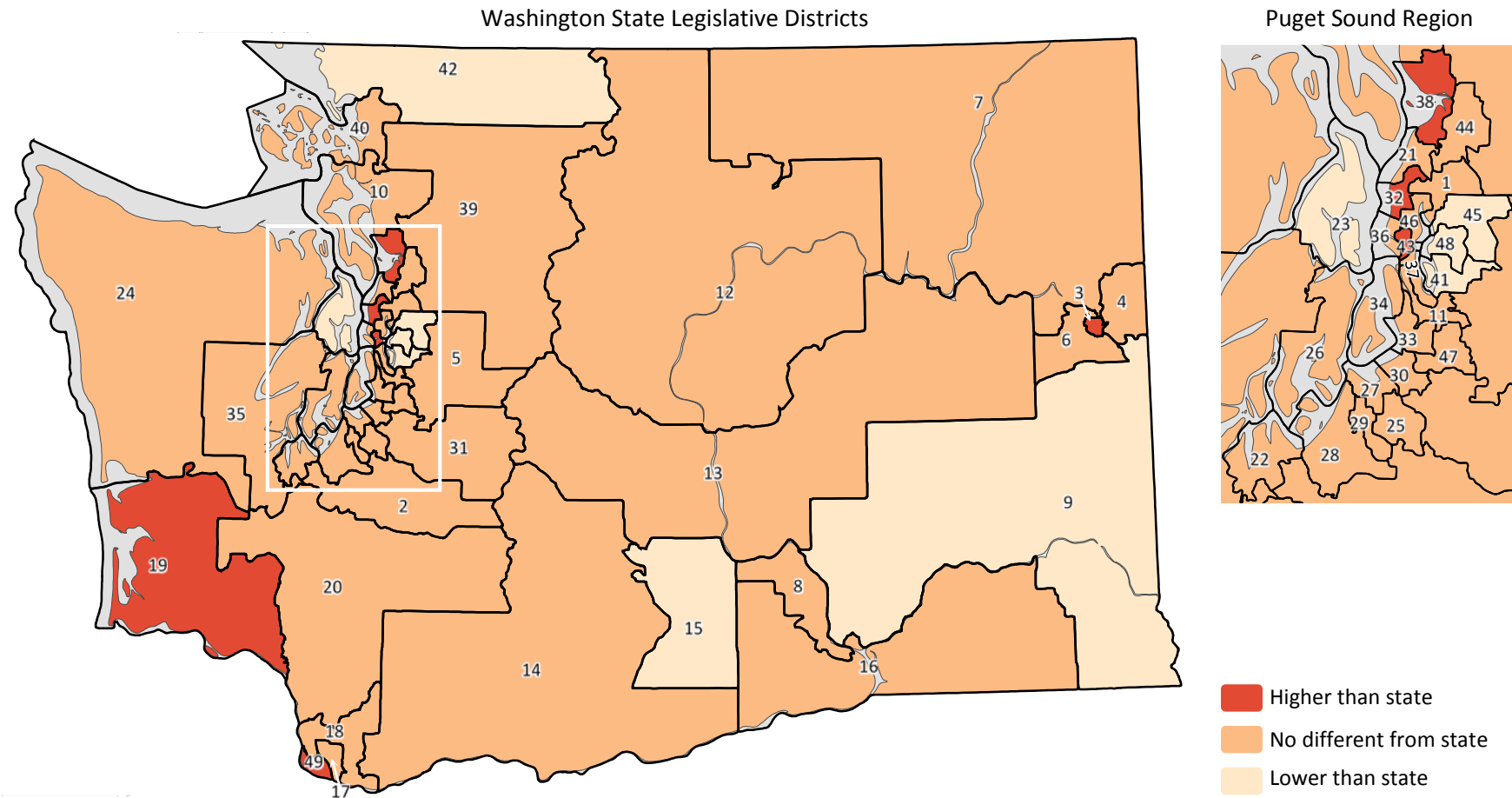
Lower rates are generally seen in the eastern Lake Washington environs and the Kitsap peninsula, as well as rural Whatcom, eastern Yakima County and the southeast corner of the state.

Unintentional poisoning mortality rate ranked highest to lowest by district



Unintentional Poisoning Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Motor Vehicle Crash Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Motor vehicle crashes (MVC) are the second-leading cause of unintentional injury deaths among Washington residents, totaling 1,490 deaths from 2012 to 2014, for an average of 497 per year. Among those deaths, there is enough information from 1,439 (97 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 13.8 per 100,000 persons.

Among the 49 districts, seven have a rate significantly higher than the state's and four have a rate that is lower. There is a six-fold difference between the district with the highest rate and the district with the lowest.

As with unintentional injuries in general, all MVC deaths are potentially preventable.

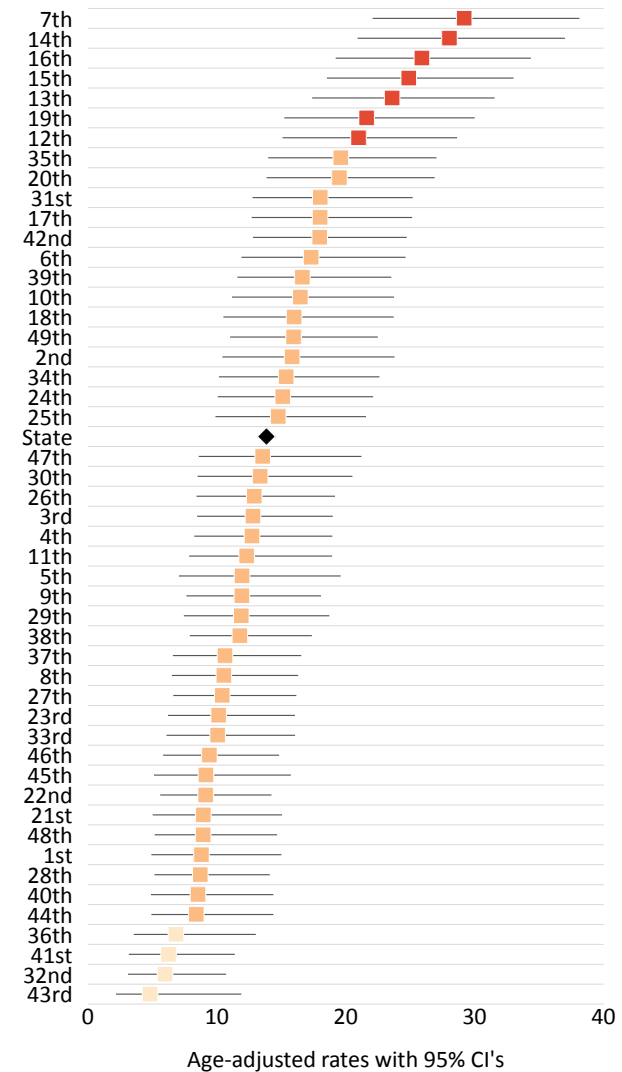
The highest rates are seen in the 7th, 14th and 16th districts with age-adjusted rates per 100,000 persons of 29.2, 28.0 and 25.9, respectively.

The lowest rates are seen in the 43rd, 32nd and 41st districts with rates of 4.8, 6.0 and 6.2, respectively.

Higher rates are generally seen across the central rural sector of the state from the far northeast corner to the south central region, as well as in the southwest coastal area.

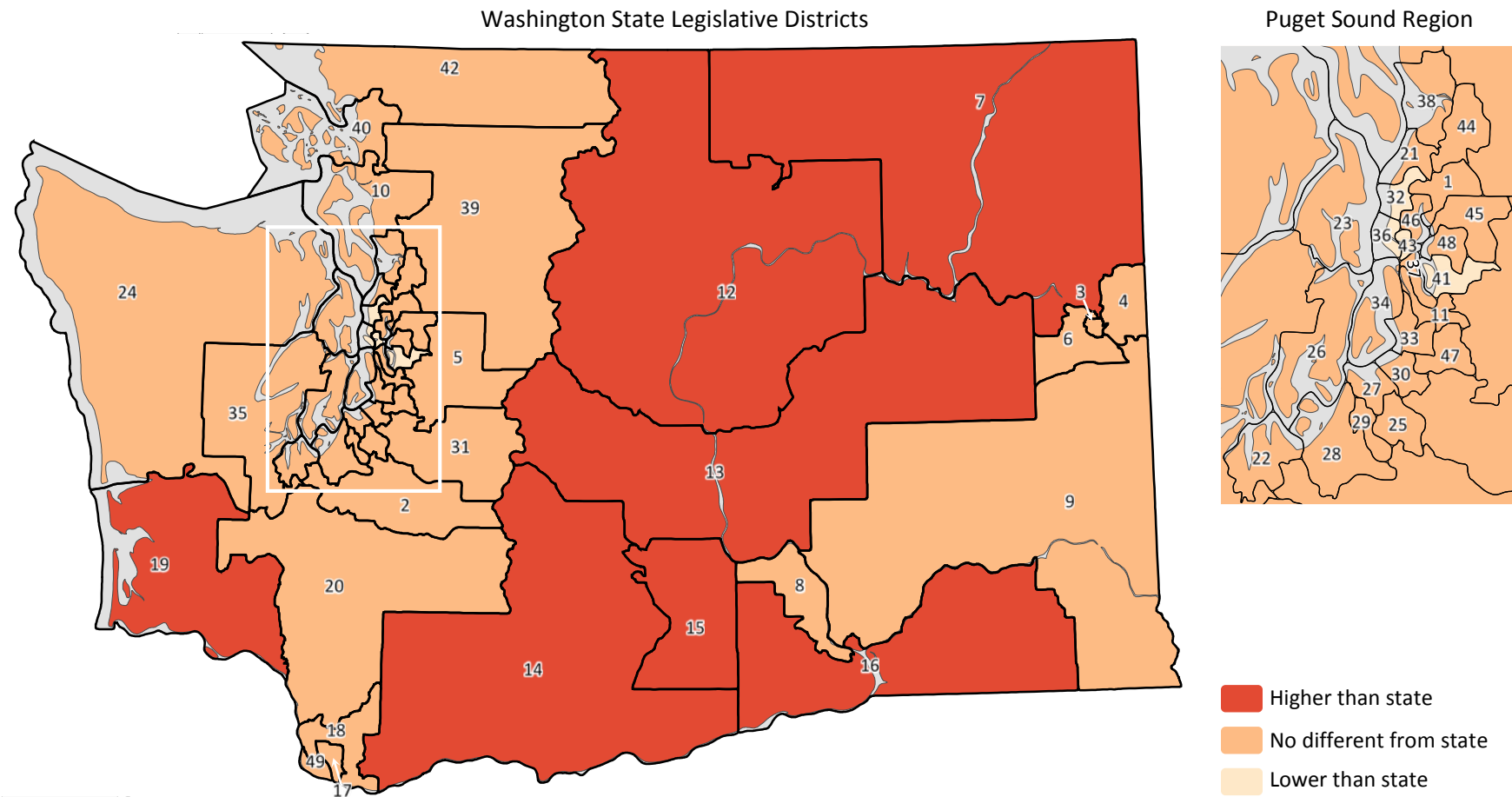
Lower rates are generally seen in and around the Lake Washington environs.

Motor vehicle crash mortality rate ranked highest to lowest by district



Motor Vehicle Crash Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Stroke Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Cerebrovascular diseases, commonly known as strokes, are the sixth-leading cause of deaths among Washington residents, totaling 7,767 deaths from 2012 to 2014, for an average of 2,589 per year. Among those deaths, there is enough information from 7,652 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 34.4 per 100,000 persons.

Among the 49 districts, six have a rate significantly higher than the state's and seven have a rate that is lower. There is a 2.4-fold difference between the district with the highest rate and the district with the lowest.

Strokes can be affected by lifestyle (e.g., smoking, exercise and diet choices) and therapies (e.g., blood pressure and cholesterol-lowering drugs), and the effects of the disease can be mitigated through rapid access to definitive hospital care.

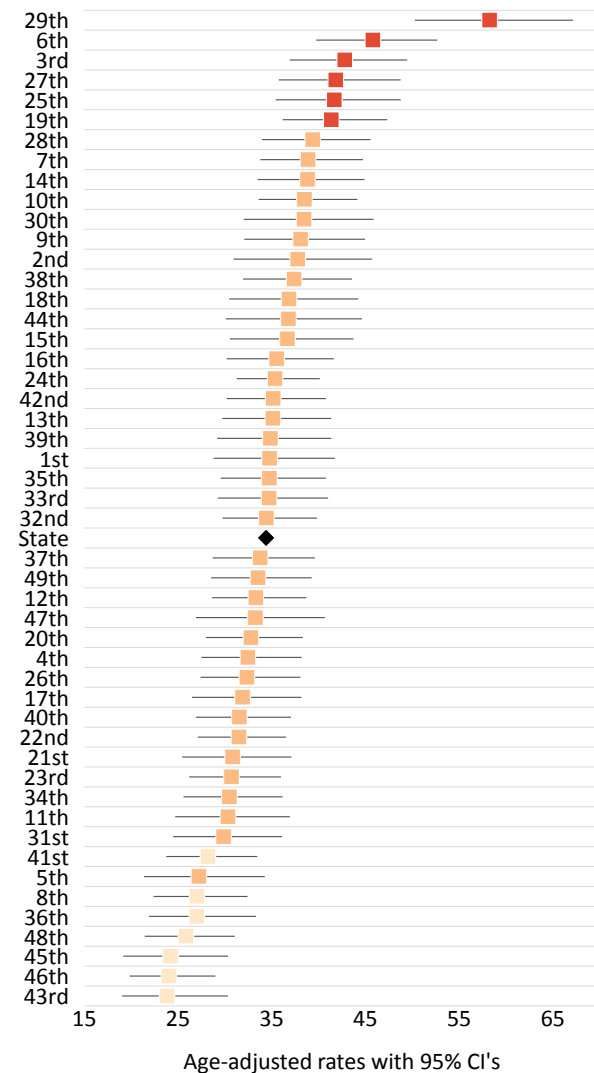
The highest rates are seen in the 29th, 6th and 3rd districts with age-adjusted rates per 100,000 persons of 58.2, 45.8 and 42.8, respectively. The rate for the 29th district is significantly higher than the rates in all other districts except the 6th.

The lowest rates are in the 43rd, 46th and 45th districts with rates of 23.8, 24.0 and 24.2, respectively.

Higher rates are seen in the Lakewood, Tacoma and Puyallup region, Spokane city and its environs, and in the southwest coastal area.

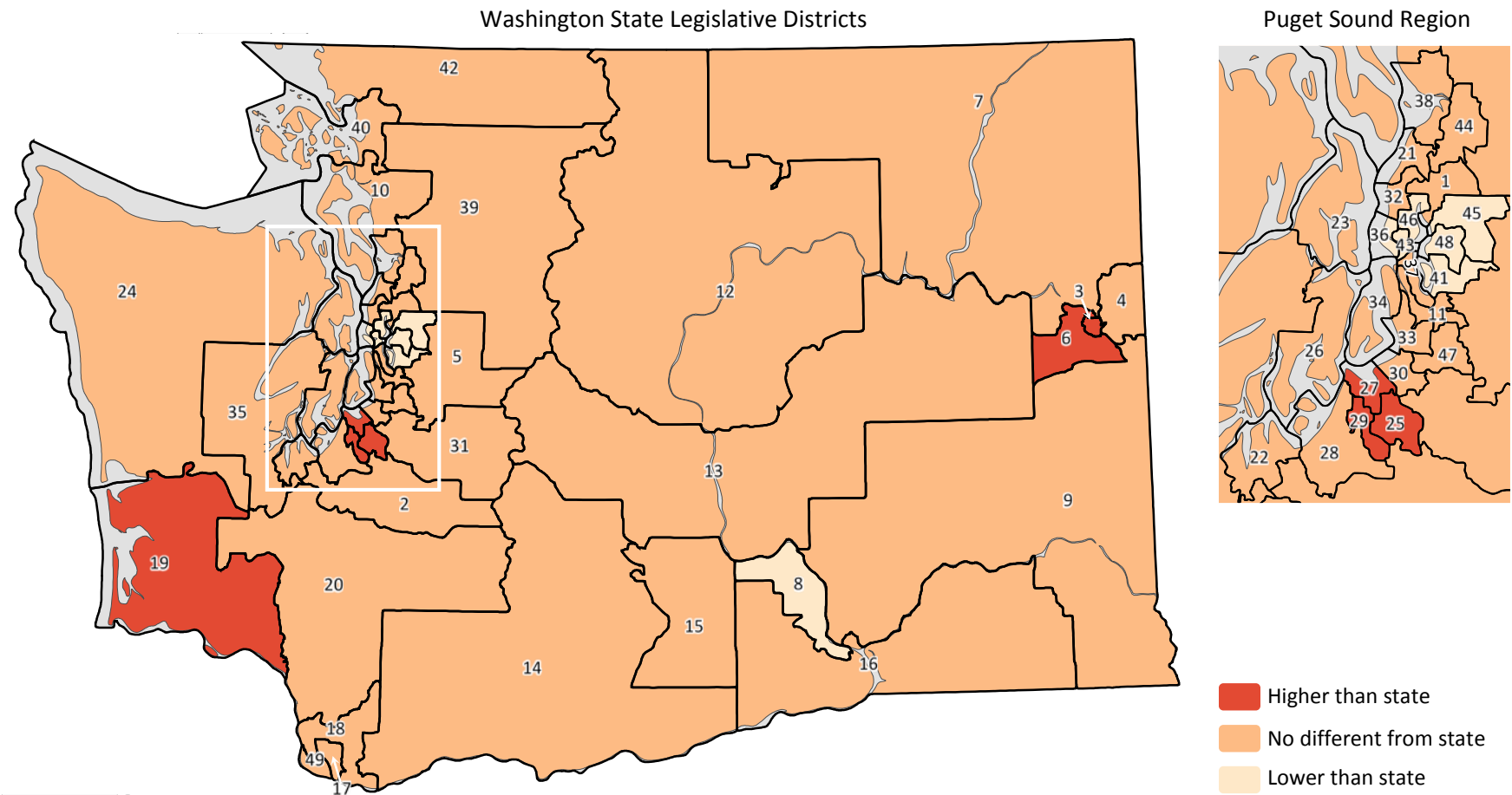
Lower rates are generally seen in the Lake Washington region and Tri-City environs.

Stroke mortality rate ranked highest to lowest by district



Stroke Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Diabetes Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Diabetes is the seventh-leading cause of deaths among Washington residents, totaling 4,918 deaths from 2012 to 2014, for an average of 1,639 per year. Among those deaths, there is enough information from 4,852 (99 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 21.5 per 100,000 persons.

Among the 49 districts, eight have a rate significantly higher than the state's and two have a rate that is lower. There is a four-fold difference between the district with the highest rate and the district with the lowest.

Type 2 diabetes, the most prevalent form of the disease, is potentially preventable, largely through diet and exercise.

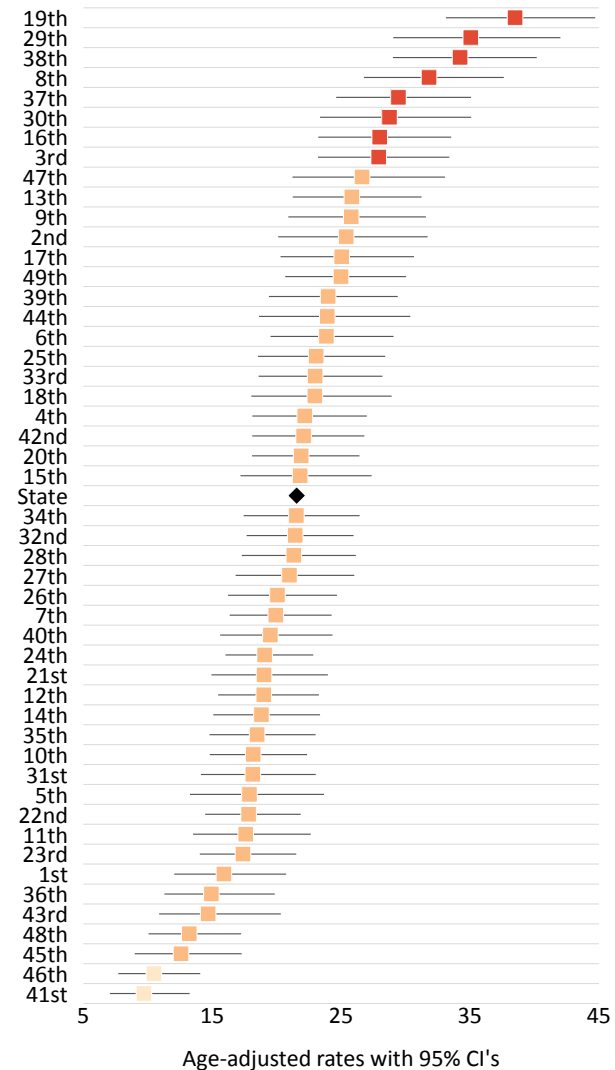
The highest rates are seen in the 19th, 29th and 38th districts with age-adjusted rates per 100,000 persons of 38.5, 35.1 and 34.2, respectively. The rate for the 19th district is significantly higher than the rates in 41 other districts.

The lowest rates are seen in the 41st and 46th districts with rates of 9.7 and 10.5, respectively. The rate for the 41st district is significantly lower than the rates in 41 other districts.

Higher rates are seen in the southwest coastal region, Lakewood, south Tacoma, Rainier Valley and Everett environs, Spokane city and Benton and Walla Walla counties.

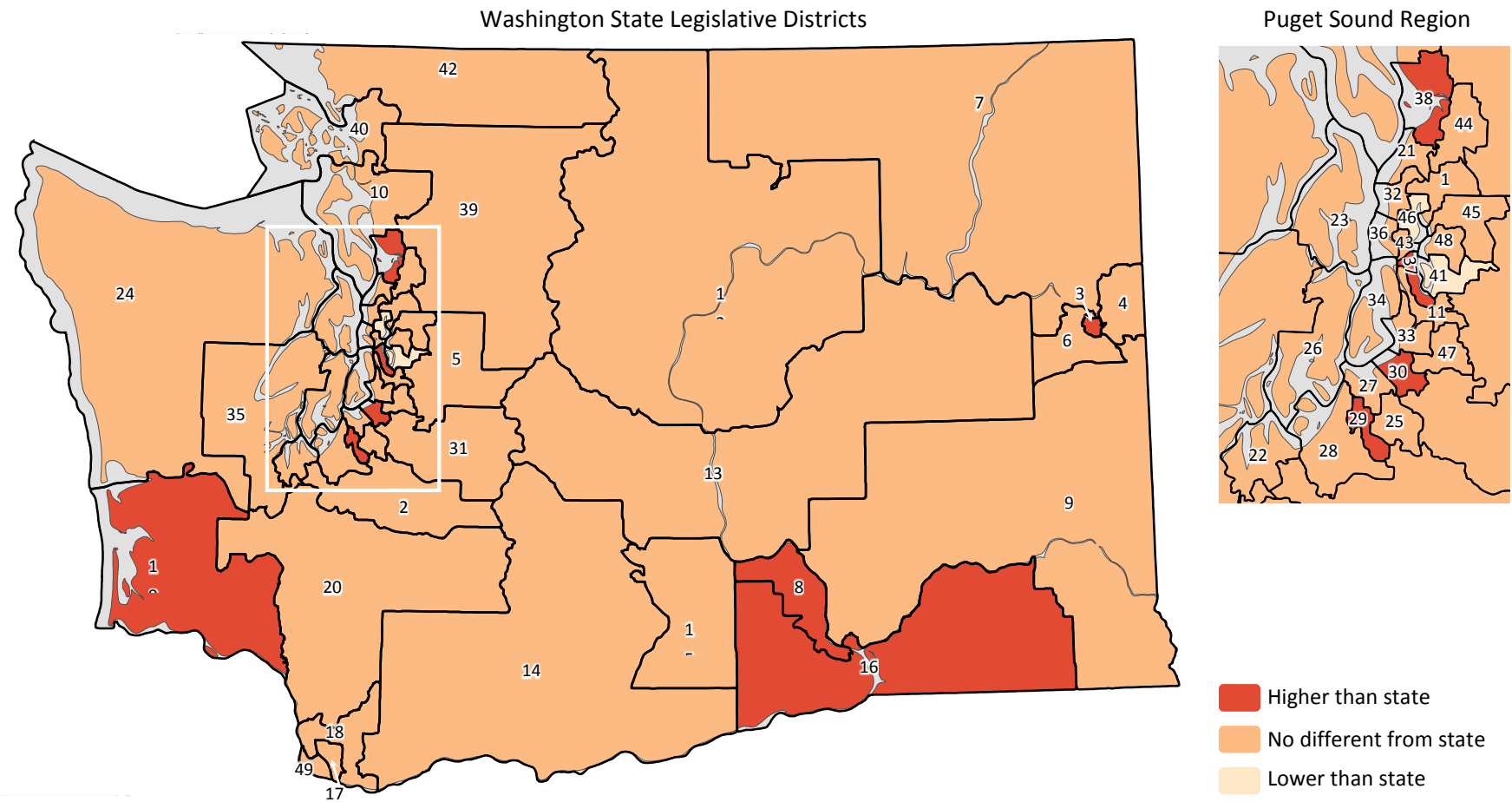
Lower rates are seen around Lake Washington.

Diabetes mortality rate ranked highest to lowest by district



Diabetes Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Suicide Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Suicide is the eighth-leading cause of deaths among Washington residents, totaling 3,154 deaths from 2012 to 2014, for an average of 1,051 per year. Among those deaths, there is enough information from 3,090 (98 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 14.3 per 100,000 persons.

Among the 49 districts, five have a rate significantly higher than the state's and three have a rate that is lower. There is more than a two-fold difference between the district with the highest rate and the district with the lowest.

All suicides are preventable.

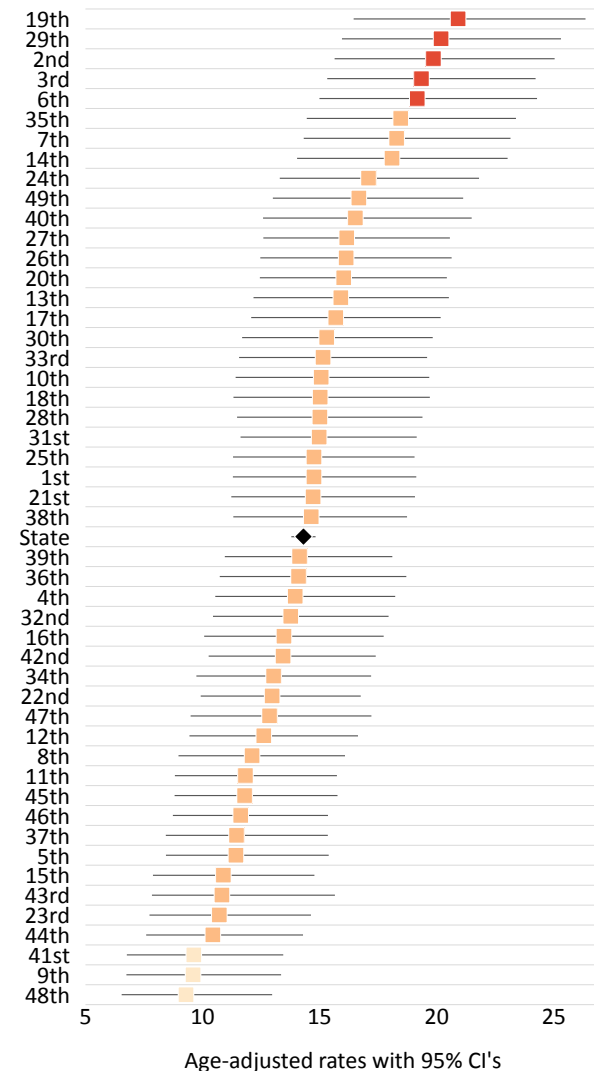
The highest rates are seen in the 19th, 29th, 2nd, 3rd and 6th districts with age-adjusted rates per 100,000 persons of 20.9, 20.2, 19.9, 19.3 and 19.2, respectively.

The lowest rates are seen in the 48th, 9th and 41st districts with rates of 9.3, 9.6 and 9.6, respectively.

Higher rates are seen in the southwest coastal region, Lakewood, south Tacoma, Rainier Valley and Everett environs, Spokane city area and in Benton and Walla Walla counties.

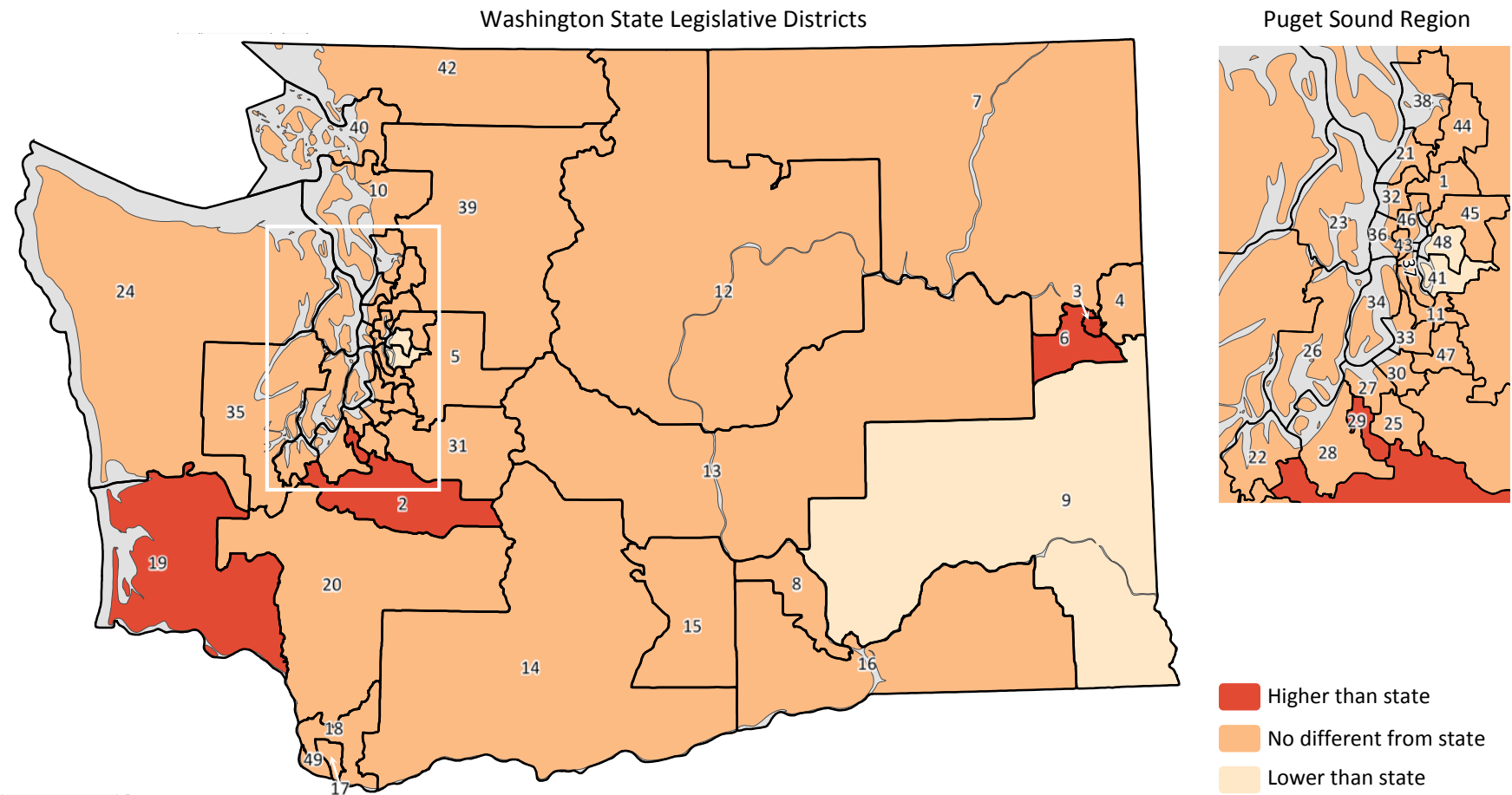
Lower rates are seen around Lake Washington.

Suicide mortality rate ranked highest to lowest by district



Suicide Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Firearm Suicide Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Firearms, which are used in almost half* of all suicide deaths among Washington residents, accounted for 1,549 suicide deaths from 2012 to 2014, for an average of 516 per year. Among those deaths, there is enough information from 1,520 (98 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 7.0 per 100,000 persons.

Among the 49 districts, three have a rate significantly higher than the state's and five have a rate that is lower. There is more than a five-fold difference between the district with the highest rate and the district with the lowest.

As with suicides in general, all firearm suicides are potentially preventable.

The highest rates are seen in the 7th, 19th and 6th districts with age-adjusted rates per 100,000 persons of 12.0, 11.0 and 10.5, respectively.

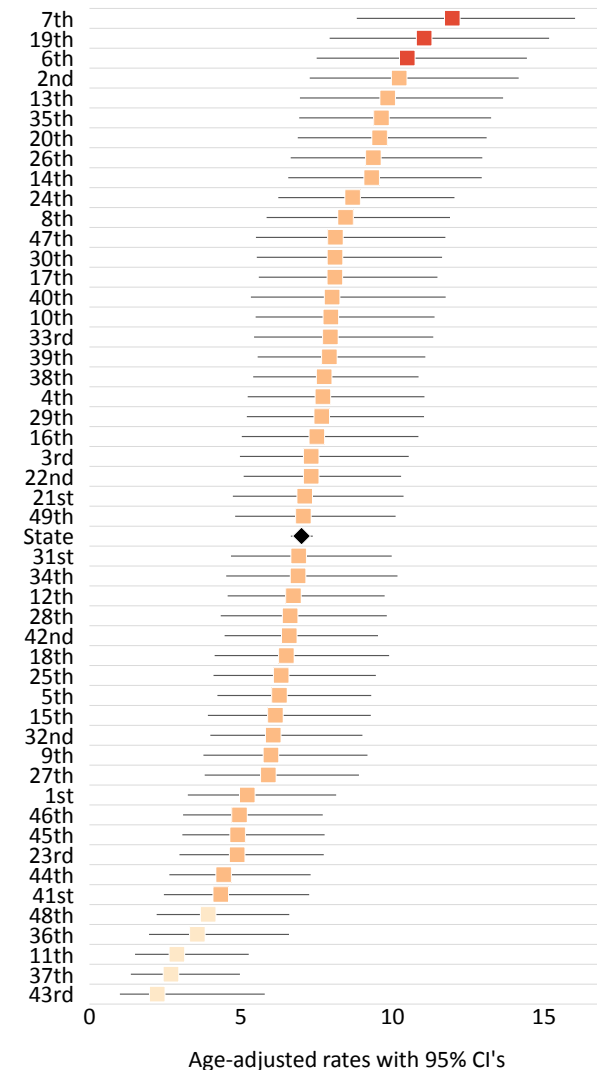
The lowest rates are seen in the 43rd, 37th, 11th, 36th and 48th districts with rates of 2.2, 2.7, 2.9, 3.6 and 3.9, respectively.

Higher rates are seen in the southwest coastal region and the northeast corner of the state.

Lower rates are seen around Lake Washington.

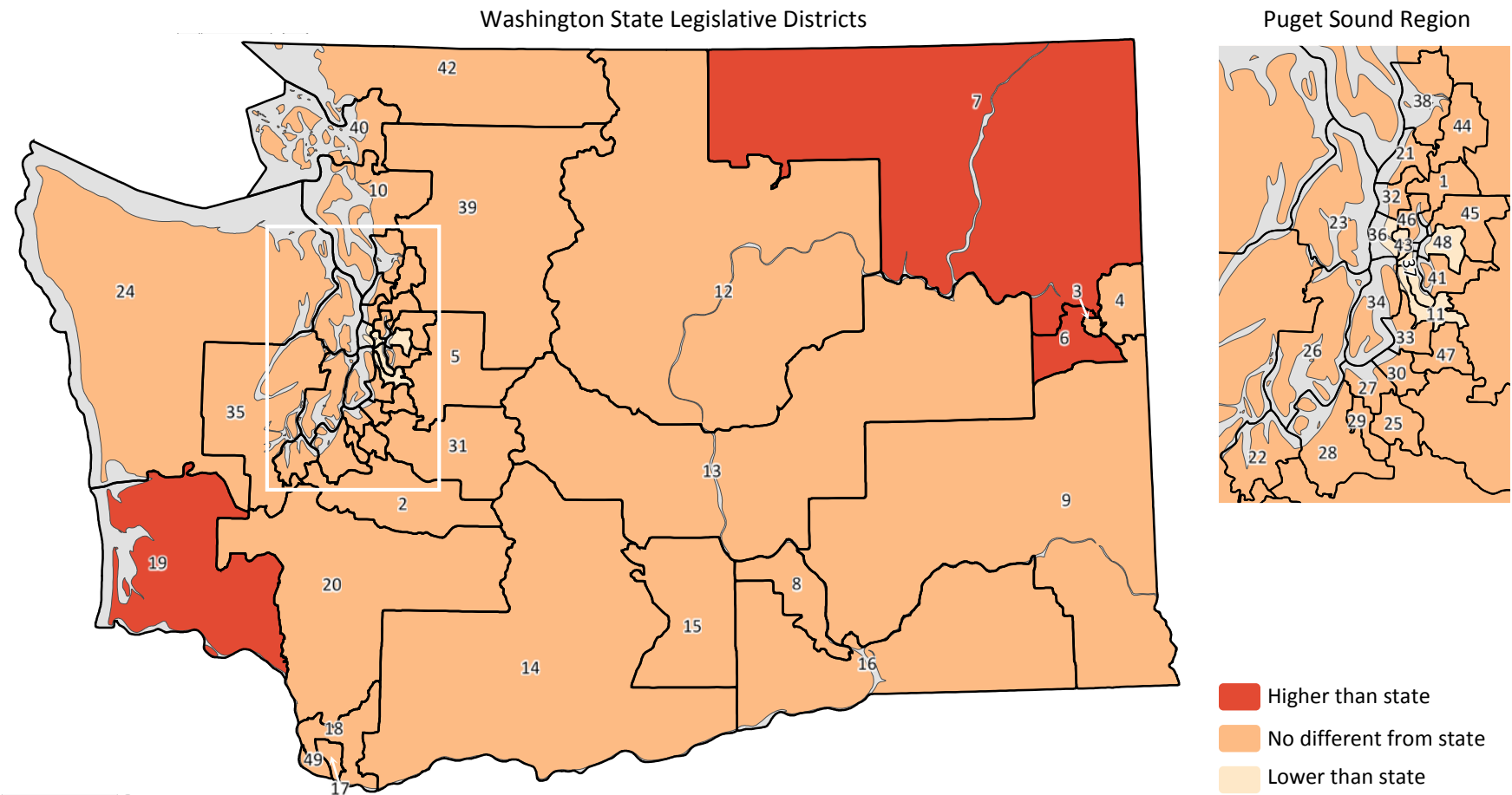
*While firearms are used in 49 percent of all suicides, firearm suicides account for 78 percent of all firearm deaths; the remaining 22 percent of firearm deaths are homicides or unintentional.

Firearm suicide mortality rate ranked highest to lowest by district



Firearm Suicide Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Chronic Liver Disease Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Chronic liver disease is the ninth-leading cause of deaths among Washington residents, totaling 2,719 deaths from 2012 to 2014, for an average of 906 per year. Among those deaths, there is enough information from 2,646 (97 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 11.1 per 100,000 persons.

Among the 49 districts, four have a rate significantly higher than the state's and five have a rate that is lower. There is a four-fold difference between the district with the highest rate and the district with the lowest.

Major risk factors for chronic liver disease include alcoholism and IV drug use.

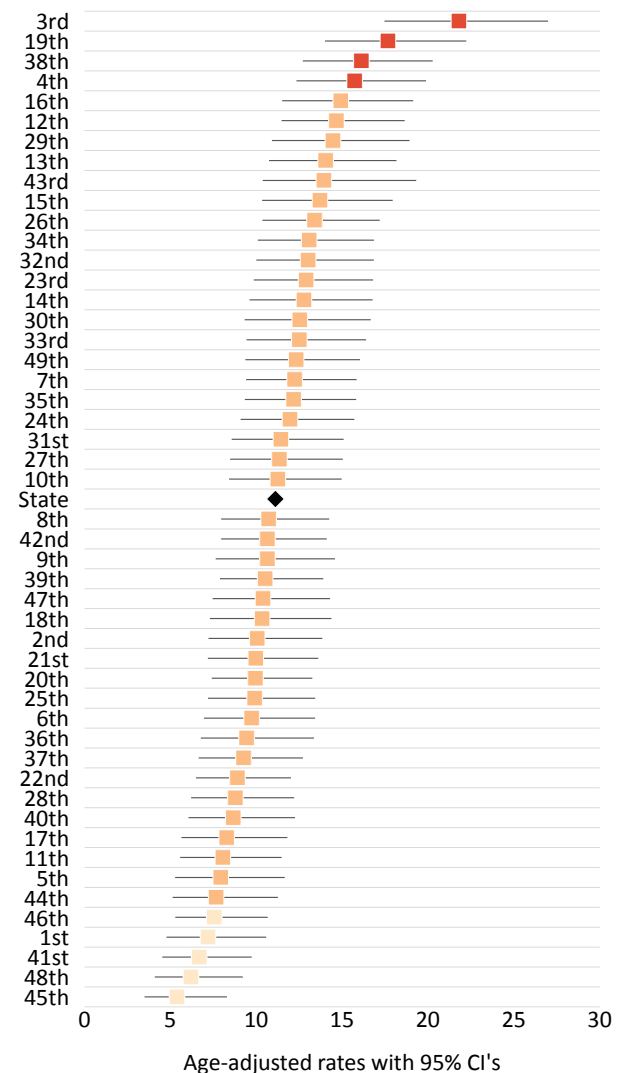
The highest rates are seen in the 3rd, 19th, 38th and 4th districts with age-adjusted rates per 100,000 persons of 21.8, 17.7, 16.1 and 15.7, respectively.

The lowest rates are seen in the 45th, 48th, 41st, 1st and 46th districts with rates of 5.4, 6.2, 6.7, 7.2 and 7.6, respectively.

Higher rates are seen in the southwest coastal region, Everett environs and greater Spokane city area.

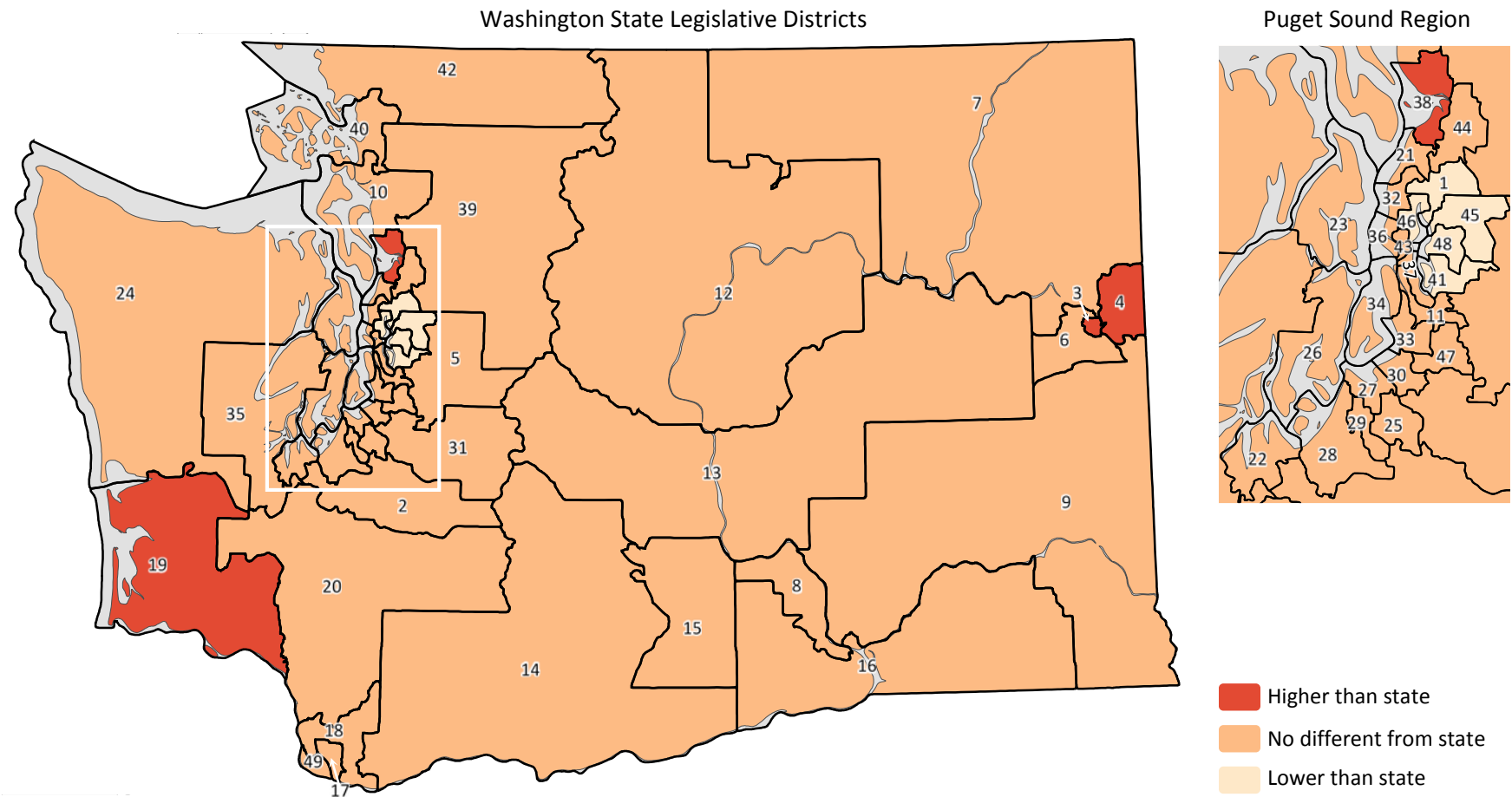
Lower rates are seen around Lake Washington.

Chronic liver disease mortality rate ranked highest to lowest by district



Chronic Liver Disease Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Influenza and Pneumonia Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined

Influenza and pneumonia are the 10th-leading cause of deaths among Washington residents, totaling 2,198 deaths from 2012 to 2014, for an average of 733 per year. Among those deaths, there is enough information from 2,159 (98 percent) to be geocoded to legislative districts. Using those data, the statewide age-adjusted rate is 9.6 per 100,000 persons.

Among the 49 districts, five have a rate significantly higher than the state's and two have a rate that is lower. There is a 3.4-fold difference between the district with the highest rate and the district with the lowest.

Both influenza and pneumonia deaths are potentially preventable through vaccinations or primary care services.

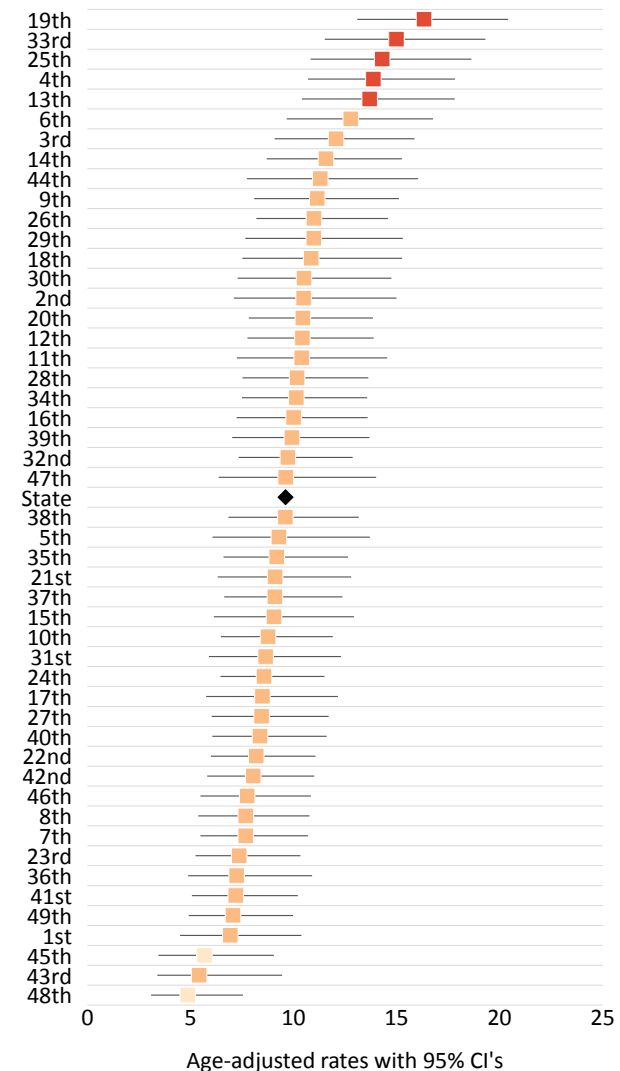
The highest rates are seen in the 19th, 33rd, 25th, 4th and 13th districts with age-adjusted rates per 100,000 persons of 16.3, 15.0, 14.3, 13.9 and 13.7, respectively.

The lowest rates are seen in the 48th, 43rd and 45th districts with rates of 4.9, 5.4 and 5.7, respectively. However, using confidence intervals as a test of significance, the rate for the 43rd does not appear to be significantly lower than the state's rate.

Higher rates are seen in the southwest coastal region, SeaTac and Puyallup environs, across the eastern central region and greater eastern Spokane area.

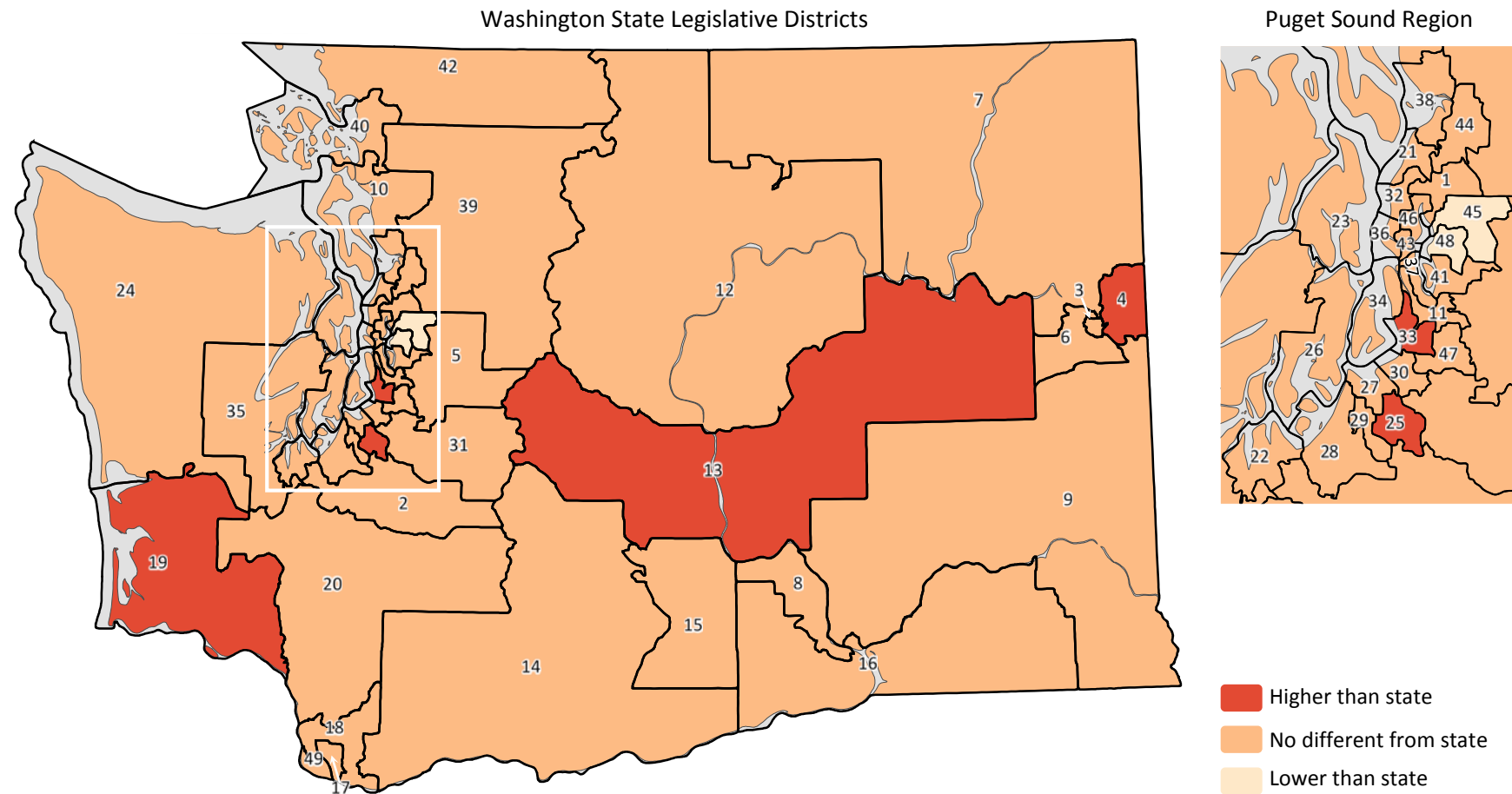
Lower rates are seen east of Lake Washington.

Influenza and pneumonia mortality rate ranked highest to lowest by district



Influenza and Pneumonia Mortality Rates by State Legislative Districts

Age-adjusted per 100,000 persons, 2012–14 combined



Appendix A – Causes of Death Codes

Leading Causes of Death

Condition	ICD-10 Code(s)
All cancers	C00-C97
Lung cancer	C33-C34
Female breast cancer	C50
Prostate cancer	C61
Colorectal cancer	C18-C21
All heart disease	I00-I09, I11, I13, I20-I51
Coronary artery disease	I20-I25
Alzheimer's disease	G30
Chronic obstructive pulmonary disease	J40-J47
Unintentional injury	V01-X59, Y85-Y86
Unintentional poisoning	X40-X44
Motor vehicle crash	V40-V59
Stroke	I60-I69
Diabetes	E10-E14
Suicide	X60-X84, Y87.0
Firearm suicide	X72-X74
Chronic liver disease	K70, K73-K74
Influenza and pneumonia	J10-J18

Source: National Center for Health Statistics

Smoking-Attributable Fractions by Sex and Age*

		Males		Females		
		ICD-10	35-64	65+	35-64	65+
Malignant neoplasms						
Lip, oral cavity, pharynx	C00-C14	73%	68%	52%	43%	
Esophagus	C15	69%	70%	63%	53%	
Stomach	C16	25%	25%	13%	12%	
Pancreas	C25	23%	16%	27%	22%	
Larynx	C32	81%	80%	77%	70%	
Lung & bronchus	C33, C34	87%	86%	76%	68%	
Cervix uteri	C53	--	--	13%	9%	
Kidney & renal pelvis	C64, C65	36%	35%	6%	4%	
Urinary bladder	C67	44%	44%	31%	28%	
Acute myeloid leukemia	C920	21%	20%	10%	11%	
Cardiovascular diseases						
Ischemic heart disease	I20-I25	35%	14%	32%	10%	
Other heart disease	I00-I09, I26-I51	18%	16%	11%	8%	
Cerebrovascular disease	I60-I69	31%	7%	39%	5%	
Atherosclerosis	I70	28%	23%	14%	7%	
Aortic aneurysm	I71	62%	61%	59%	46%	
Other arterial diseases	I72-I74, I77-I78	17%	9%	20%	12%	
Respiratory diseases						
Pneumonia & influenza	J10-J18	21%	21%	20%	12%	
Bronchitis & emphysema	J40-J43	89%	90%	82%	81%	
Chronic airway obstruction	J44	79%	80%	79%	74%	

* Among adults ages 35 and older

Source: CDC Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC)

Health Care Amenable Deaths

<u>Cause of death considered amenable to health care</u>	<u>Age</u>	<u>ICD-10</u>
Infectious disease		
Intestinal infections	0-14	A00-9
Tuberculosis	0-74	A15-9, B90
Other infections (diphtheria, tetanus, septicemia, poliomyelitis)	0-74	A36, A35, A80
Whooping cough	0-14	A37
Measles	1-14	B05
Cancers		
Malignant neoplasm of colon and rectum	0-74	C18-21
Malignant neoplasm of skin	0-74	C44
Malignant neoplasm of breast	0-74	C50
Malignant neoplasm of cervix uteri	0-74	C53
Malignant neoplasm of cervix uteri and body of uterus	0-44	C54, C55
Malignant neoplasm of testis	0-74	C62
Hodgkin's disease	0-74	C81
Leukemia	0-44	C91-5
Diabetes	0-49	E10-4
Ischemic heart disease: 50% of deaths	0-74	I20-5
Other circulatory disease		
Chronic rheumatic heart disease	0-74	I05-9
Hypertensive disease	0-74	I10-3, I15
Cerebrovascular disease	0-74	I60-9

Health Care Amenable Deaths (continued)

<u>Cause of death considered amenable to health care</u>	<u>Age</u>	<u>ICD-10</u>
Respiratory disease		
All respiratory diseases (excl. pneumonia, influenza)	1-14	J00-9, J20-99
Influenza	0-74	J10-1
Pneumonia	0-74	J12-8
Surgical conditions		
Peptic ulcer	0-74	K25-7
Appendicitis	0-74	K35-8
Abdominal hernia	0-74	K40-6
Cholelithiasis and cholecystitis	0-74	K80-1
Nephritis and nephrosis	0-74	N00-7, N17-9, N25-7
Benign prostatic hyperplasia	0-74	N40
Misadventures to patients	0-74	E870-6, E878-9, Y60-9, Y83-4
Maternal, congenital and perinatal conditions		
Maternal death	0-74	O00-99
Congenital cardiovascular anomalies	0-74	Q20-8
Perinatal deaths, all causes, excluding stillbirths	0-74	P00-96, A33
Other conditions		
Diseases of the thyroid	0-74	E00-7
Epilepsy	0-74	G40-1

Source: Nolte E, McKee CM. In amenable mortality — deaths avoidable through health care — progress in the US lags that of three European countries. *Health Aff (Millwood)*. 2012;31(9).
Published online Aug. 29, 2012

Appendix B – Data Tables

Variations in Life Expectancy and Mortality Rates by State Legislative Districts

Life Expectancy					All Causes					Smoking Attributable					Health Care Amenable				
District	Life Exp	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths			
1st	82.7	82.3	83.1	2196	580.4	555.6	606.2	2196	78.1	69.1	88.0	298	43.3	37.3	50.2	201			
2nd	78.1	77.7	78.6	2691	807.6	776.0	840.3	2691	132.2	119.8	145.7	457	63.3	56.0	71.4	290			
3rd	76.6	76.1	77	3819	841.1	814.0	869.0	3819	135.3	124.5	147.0	604	71.9	64.1	80.5	321			
4th	79.2	78.7	79.6	3638	750.8	726.1	776.2	3638	110.3	101.0	120.3	541	51.8	45.5	58.8	260			
5th	82.5	82.1	82.9	1925	605.6	577.4	634.9	1925	82.1	71.9	93.3	267	36.0	30.7	42.3	175			
6th	79.3	78.8	79.7	3509	756.5	731.0	782.7	3509	106.2	96.8	116.5	487	51.9	45.2	59.6	226			
7th	79.8	79.4	80.3	3749	669.3	647.2	692.0	3749	102.9	94.6	111.8	614	49.6	43.9	56.1	318			
8th	80.7	80.3	81.1	3076	668.0	644.2	692.5	3076	100.2	91.1	110.0	465	54.3	47.7	61.6	259			
9th	80.6	80.2	81.1	2601	663.9	638.2	690.5	2601	93.7	84.1	104.1	363	55.6	48.7	63.4	241			
10th	81	80.6	81.4	3723	644.9	623.8	666.8	3723	86.2	78.8	94.4	511	49.5	43.7	56.1	290			
11th	81.4	81	81.9	2299	626.3	600.2	653.4	2299	88.6	78.9	99.3	323	59.6	52.7	67.3	279			
12th	80.2	79.8	80.6	3642	668.2	646.2	690.9	3642	95.2	87.1	103.9	530	49.1	43.2	55.8	267			
13th	80.7	80.2	81.1	2864	643.9	620.2	668.5	2864	96.5	87.5	106.2	436	49.5	43.3	56.6	235			
14th	79.1	78.7	79.6	3469	704.1	680.3	728.7	3469	103.9	95.0	113.5	526	61.7	54.9	69.4	312			
15th	79.1	78.6	79.6	2672	726.2	698.5	754.7	2672	112.3	101.6	123.9	415	70.1	62.3	78.8	300			
16th	80.2	79.7	80.6	3000	665.2	641.1	690.0	3000	98.4	89.3	108.3	444	53.1	46.5	60.6	237			
17th	79.7	79.2	80.1	2933	728.3	701.6	755.9	2933	99.9	90.2	110.5	407	52.2	45.7	59.5	243			
18th	80.3	79.9	80.7	2486	707.9	679.4	737.3	2486	99.8	89.3	111.2	359	43.8	37.9	50.6	207			
19th	76.1	75.6	76.5	4661	883.7	857.7	910.6	4661	138.8	128.9	149.6	762	81.8	73.6	90.9	409			
20th	79.6	79.2	80	3740	703.2	680.4	726.8	3740	113.0	104.2	122.6	626	57.5	51.3	64.5	341			
21st	81.1	80.6	81.5	2681	667.1	641.5	693.5	2681	93.8	84.2	104.2	371	49.3	43.0	56.4	229			
22nd	81.5	81	81.9	3632	618.8	598.3	640.1	3632	89.5	81.8	98.0	517	47.7	41.9	54.2	256			
23rd	81.8	81.4	82.3	3242	591.9	571.2	613.4	3242	80.6	73.2	88.8	452	48.0	42.0	54.7	260			
24th	80.5	80	80.9	4993	649.2	630.1	669.0	4993	100.2	93.2	107.9	809	51.7	45.8	58.3	364			
25th	79.5	79	79.9	2983	729.3	702.9	756.5	2983	112.7	102.4	123.8	463	59.6	52.6	67.3	274			
26th	80.1	79.7	80.6	3436	696.4	672.8	720.8	3436	99.1	90.5	108.5	509	52.2	46.1	59.1	290			
27th	78.8	78.4	79.3	3210	741.5	715.3	768.4	3210	113.5	103.3	124.5	486	70.9	63.3	79.3	331			
28th	80.1	79.6	80.5	3304	691.7	667.9	716.2	3304	100.1	91.2	109.8	475	58.2	51.4	65.8	272			
29th	76.2	75.8	76.7	3147	894.0	862.4	926.5	3147	142.7	130.3	155.9	513	97.0	87.5	107.4	393			
30th	77.9	77.4	78.3	2954	834.4	803.9	865.9	2954	122.9	111.4	135.4	442	68.9	61.2	77.4	300			
31st	81	80.6	81.5	2644	645.8	620.6	671.8	2644	93.5	84.1	103.8	388	43.6	38.0	50.0	229			
32nd	79.9	79.5	80.3	4153	717.3	694.7	740.5	4153	91.4	83.3	100.1	508	58.8	52.1	66.3	299			
33rd	79.2	78.8	79.7	3095	727.4	701.4	754.2	3095	103.2	93.4	113.9	427	66.8	59.2	75.3	286			
34th	81.5	81	81.9	2995	624.6	601.6	648.3	2995	85.6	77.2	94.9	403	47.7	41.7	54.4	242			
35th	79.4	78.9	79.9	3439	709.8	685.6	734.8	3439	109.7	100.6	119.7	562	56.5	50.0	63.7	313			
36th	82.5	82	83	2309	583.4	558.8	609.1	2309	80.0	70.9	90.3	307	52.8	45.9	60.8	228			
37th	80.9	80.4	81.3	3076	642.4	619.4	666.2	3076	79.2	71.3	88.0	380	62.6	55.6	70.4	297			
38th	78.9	78.5	79.4	3358	728.8	703.8	754.5	3358	111.9	102.2	122.3	516	64.3	57.3	72.1	319			
39th	80.7	80.3	81.1	2782	649.5	624.8	675.0	2782	101.8	92.2	112.1	451	49.7	43.8	56.2	273			
40th	81.6	81.2	82.1	3078	609.2	587.1	632.0	3078	83.2	75.4	91.9	435	48.0	41.6	55.4	232			
41st	84.3	83.9	84.7	2507	505.5	485.5	526.2	2507	59.2	52.5	66.7	293	32.3	27.3	38.3	155			
42nd	80.7	80.3	81.1	3414	657.1	634.8	680.1	3414	92.2	84.0	101.0	484	48.8	43.0	55.4	266			
43rd	82.6	82.1	83.1	2132	552.1	527.6	578.0	2132	67.3	58.7	77.5	246	43.4	36.6	51.9	164			
44th	81	80.5	81.4	2154	669.5	640.4	699.7	2154	97.1	86.2	109.1	318	48.3	41.8	55.7	211			
45th	83.8	83.3	84.2	1964	533.2	508.7	558.8	1964	68.3	59.5	78.2	243	31.5	26.4	37.5	149			
46th	84	83.5	84.4	2620	518.9	498.6	539.9	2620	64.7	57.6	72.6	320	38.5	33.1	44.6	194			
47th	80	79.5	80.4	2375	719.1	689.5	749.8	2375	93.5	83.2	104.8	326	47.9	41.5	55.1	213			
48th	84.7	84.3	85	2382	495.3	475.2	516.2	2382	57.5	50.8	65.2	270	28.8	24.1	34.4	135			
49th	79.2	78.7	79.6	3554	717.9	694.1	742.4	3554	106.6	97.6	116.4	531	59.8	53.1	67.2	302			
State	80.4	80.4	80.5	150306	670.9	667.5	674.4	150306	96.9	95.6	98.2	21882	53.2	52.3	54.2	12875			

Variations in Life Expectancy and Mortality Rates by State Legislative Districts

All Cancers					Lung Cancer					Female Breast Cancer					Prostate Cancer				
District	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths			
1st	140.0	128.0	153.0	552	30.1	24.6	36.7	113	13.9	9.6	20.0	35	17.7	11.0	27.0	22			
2nd	195.8	180.9	211.8	698	61.6	53.2	70.9	217	25.5	18.6	34.3	49	17.7	10.8	27.5	22			
3rd	178.8	166.2	192.2	782	53.7	46.9	61.5	229	16.3	11.5	22.9	40	22.2	15.8	30.6	40			
4th	173.1	161.4	185.6	850	46.6	40.7	53.4	231	22.0	16.6	28.9	59	22.4	16.2	30.4	45			
5th	136.8	124.0	150.7	480	34.5	28.1	42.1	115	22.3	15.8	31.1	42	16.0	9.6	25.4	22			
6th	167.3	155.2	180.2	750	38.4	32.7	45.0	169	18.6	13.3	25.8	44	16.2	11.0	23.5	31			
7th	159.1	148.8	170.1	959	39.6	34.6	45.4	240	17.1	12.7	23.0	54	21.6	16.1	28.9	56			
8th	155.9	144.6	168.1	723	44.3	38.3	51.1	203	20.7	15.4	27.6	53	20.9	14.7	28.9	38			
9th	144.9	133.0	157.7	568	33.4	27.7	40.0	125	15.4	10.6	22.0	34	20.3	14.1	28.5	36			
10th	151.0	140.9	161.7	886	34.5	29.8	39.9	205	19.4	14.7	25.7	63	18.2	13.3	24.7	47			
11th	157.0	144.2	170.8	594	39.3	32.9	46.7	143	20.5	14.7	28.1	43	18.0	11.4	27.2	24			
12th	153.0	142.6	164.1	840	35.4	30.5	41.0	196	16.4	12.0	22.3	48	23.6	17.8	31.0	57			
13th	142.7	131.7	154.5	647	36.2	30.8	42.4	166	13.1	8.9	19.1	32	21.6	15.5	29.6	42			
14th	161.1	149.9	173.0	805	39.5	34.2	45.6	203	18.8	13.9	25.3	53	14.7	9.9	21.3	31			
15th	163.2	150.3	177.1	605	44.6	38.0	52.1	166	21.6	15.6	29.4	43	15.9	10.1	23.8	24			
16th	145.5	134.2	157.5	642	37.7	32.2	44.1	170	17.1	12.0	23.8	39	19.4	13.4	27.2	35			
17th	171.0	158.3	184.5	714	43.1	36.8	50.3	178	28.0	21.4	36.3	63	16.3	10.7	24.0	28			
18th	176.6	162.8	191.2	669	42.4	35.8	50.1	159	22.6	16.6	30.4	50	24.1	16.5	34.1	35			
19th	189.1	177.4	201.7	1021	52.4	46.4	59.3	287	22.9	17.1	30.5	61	18.5	13.5	25.2	46			
20th	168.8	158.0	180.4	949	47.5	41.9	53.8	269	19.4	14.7	25.7	59	18.6	13.3	25.5	43			
21st	160.7	148.1	174.0	646	40.1	33.9	47.2	157	19.6	14.3	26.5	48	15.3	9.5	23.5	22			
22nd	145.7	135.7	156.4	828	39.3	34.1	45.1	217	15.5	11.4	20.9	51	18.7	13.5	25.5	43			
23rd	137.7	127.9	148.3	769	34.2	29.4	39.7	190	16.2	12.0	22.0	53	21.8	16.1	29.4	51			
24th	157.1	148.2	166.7	1260	44.1	39.6	49.3	366	17.2	13.2	22.7	72	18.1	13.9	23.9	64			
25th	162.8	150.5	176.0	671	47.6	41.0	55.0	196	21.1	15.5	28.2	50	21.6	14.8	30.7	33			
26th	165.2	154.0	177.2	855	41.2	35.7	47.4	218	24.3	18.6	31.6	65	17.3	12.2	24.2	39			
27th	168.1	155.7	181.4	721	39.5	33.5	46.3	166	21.6	15.8	29.0	49	20.6	13.9	29.5	32			
28th	164.3	152.7	176.6	771	44.3	38.4	51.0	208	19.7	14.5	26.4	50	21.3	15.4	29.1	43			
29th	191.2	176.9	206.5	687	60.0	52.1	68.8	215	19.9	14.2	27.5	40	14.1	8.2	22.8	18			
30th	191.0	176.7	206.2	701	50.8	43.5	59.0	186	21.6	15.8	29.1	48	22.8	15.5	32.8	33			
31st	153.8	141.8	166.6	669	38.5	32.6	45.2	165	15.4	10.8	21.5	39	21.8	14.8	31.0	34			
32nd	159.9	149.1	171.5	865	38.7	33.4	44.8	202	25.7	20.1	32.9	79	20.6	14.9	28.1	44			
33rd	161.5	149.1	174.8	658	42.7	36.4	49.8	172	16.8	11.6	23.8	35	22.5	15.7	31.4	37			
34th	147.8	136.7	159.8	698	38.9	33.1	45.5	173	24.8	18.9	32.4	64	13.0	8.3	19.8	25			
35th	177.0	165.3	189.5	908	51.9	45.8	58.9	270	21.5	16.0	28.7	56	19.4	13.9	26.6	43			
36th	151.1	138.4	165.1	572	35.2	29.2	42.6	131	24.5	18.2	33.3	55	21.9	14.6	32.1	31			
37th	149.0	137.9	160.8	696	29.0	24.2	34.7	134	19.5	14.2	26.4	48	18.9	13.1	26.6	36			
38th	165.1	153.3	177.7	759	47.2	40.9	54.3	213	16.4	11.7	22.7	42	18.0	12.1	25.9	30			
39th	151.5	139.9	164.0	682	40.6	34.7	47.2	186	17.3	12.4	23.8	44	25.9	18.6	35.2	47			
40th	144.9	134.4	156.4	738	36.2	31.1	42.2	187	21.0	15.6	28.2	56	21.1	15.4	28.7	46			
41st	132.6	122.4	143.7	642	28.3	23.7	33.8	136	20.8	15.5	27.9	54	15.3	10.4	22.0	32			
42nd	149.1	138.6	160.3	776	38.2	32.9	44.2	195	18.0	13.3	24.2	51	18.2	12.9	25.0	41			
43rd	139.1	126.6	153.2	506	31.0	25.1	38.7	103	13.7	9.2	22.3	32	27.0	19.0	38.7	40			
44th	155.5	142.0	170.2	539	39.7	32.9	47.6	134	17.7	12.3	25.2	37	28.2	18.9	40.5	31			
45th	139.3	126.8	152.9	520	28.1	22.5	34.8	100	17.5	12.1	24.8	39	20.5	13.4	30.4	29			
46th	132.4	122.1	143.5	645	27.5	22.9	32.9	134	21.0	15.7	28.0	55	21.0	14.7	29.1	39			
47th	146.4	133.7	160.2	527	36.0	29.9	43.0	136	20.0	14.3	27.6	42	20.0	12.4	30.7	23			
48th	122.4	112.4	133.3	571	24.7	20.3	30.0	114	15.7	11.3	21.9	43	16.2	10.9	23.3	31			
49th	173.3	161.7	185.7	862	49.4	43.3	56.2	246	17.5	12.8	23.8	48	17.6	12.1	24.7	35			
State	156.9	155.2	158.6	35476	40.2	39.3	41.0	9034	19.4	18.6	20.2	2409	19.5	18.6	20.4	1776			

Variations in Life Expectancy and Mortality Rates by State Legislative Districts

Colorectal Cancer					All Heart Disease					Coronary Artery Disease					Alzheimer's Disease				
District	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths			
1st	11.5	8.3	15.7	46	118.9	107.8	131.0	442	70.1	61.7	79.5	265	43.5	36.8	51.2	152			
2nd	12.3	8.8	16.8	45	180.1	165.1	196.3	572	109.0	97.4	121.7	352	39.7	32.4	48.2	106			
3rd	11.8	8.8	15.6	55	154.3	143.0	166.3	724	89.8	81.2	99.2	416	33.8	28.7	39.6	164			
4th	10.7	7.9	14.2	52	130.8	120.7	141.6	643	75.2	67.6	83.6	369	47.2	41.3	53.8	236			
5th	9.8	6.7	14.1	38	122.2	109.5	136.0	372	74.0	64.2	84.9	225	41.7	34.1	50.5	107			
6th	13.6	10.3	17.8	61	132.2	121.9	143.3	641	80.0	71.9	88.8	380	55.8	49.2	63.1	273			
7th	14.4	11.3	18.2	84	127.0	117.7	137.0	726	81.2	73.9	89.3	472	31.7	27.0	37.1	166			
8th	13.4	10.1	17.4	60	134.8	124.3	146.0	629	95.2	86.4	104.7	442	67.7	60.4	75.7	320			
9th	14.1	10.5	18.7	53	140.5	129.0	152.9	560	87.9	78.8	97.9	351	37.2	31.4	44.0	145			
10th	18.1	14.7	22.3	105	126.8	117.9	136.5	767	74.0	67.2	81.5	446	48.5	43.1	54.6	298			
11th	12.8	9.3	17.2	49	120.6	109.2	133.0	433	74.7	65.8	84.6	271	34.1	28.0	41.3	109			
12th	13.2	10.2	16.9	71	138.4	128.7	148.9	771	89.1	81.4	97.6	500	50.3	44.6	56.7	286			
13th	11.8	8.8	15.7	52	150.2	138.9	162.3	674	102.6	93.4	112.6	465	30.4	25.5	36.2	136			
14th	12.0	9.1	15.7	59	165.3	154.0	177.2	839	112.9	103.6	122.9	571	35.9	30.9	41.7	188			
15th	12.9	9.5	17.3	48	189.4	175.3	204.4	686	148.0	135.6	161.3	540	41.0	34.4	48.6	137			
16th	10.8	7.9	14.4	49	131.0	120.6	142.2	608	81.2	73.0	90.1	375	47.6	41.5	54.6	223			
17th	14.6	11.2	19.0	63	136.7	125.2	149.0	545	78.1	69.5	87.6	313	51.2	44.3	59.0	199			
18th	12.0	8.5	16.5	43	149.8	136.7	163.9	508	84.3	74.6	95.0	290	41.8	34.9	49.7	131			
19th	16.9	13.6	21.2	91	186.1	174.6	198.4	1014	118.8	109.6	128.7	649	44.3	39.0	50.3	258			
20th	13.1	10.2	16.7	75	155.4	144.8	166.7	829	96.8	88.5	105.8	520	44.7	39.0	51.1	224			
21st	12.1	9.0	16.1	54	136.2	124.8	148.4	551	84.0	75.1	93.7	342	45.2	38.7	52.5	180			
22nd	12.3	9.5	15.8	71	119.7	110.9	129.2	722	70.5	63.8	77.8	428	40.0	35.2	45.5	263			
23rd	9.9	7.4	13.2	56	112.2	103.4	121.9	622	68.6	61.7	76.3	376	54.8	48.8	61.5	314			
24th	12.7	10.3	15.9	104	133.7	125.5	142.6	1075	81.8	75.4	88.9	656	32.2	28.5	36.6	277			
25th	11.6	8.5	15.6	48	161.3	149.1	174.4	667	110.3	100.3	121.2	456	47.4	40.9	54.9	188			
26th	11.5	8.8	15.1	62	129.9	119.8	140.6	645	88.2	80.0	97.2	443	65.4	58.3	73.3	312			
27th	15.4	11.9	19.8	68	159.9	147.9	172.7	695	96.0	86.7	106.1	415	35.6	30.2	41.9	157			
28th	10.5	7.7	14.0	50	132.0	121.8	142.8	646	74.2	66.7	82.4	365	44.3	38.7	50.7	225			
29th	16.2	12.2	21.1	58	197.1	182.4	212.7	690	125.7	114.1	138.3	441	52.8	45.0	61.6	163			
30th	17.4	13.4	22.4	67	175.7	161.6	190.7	603	115.4	104.0	127.7	396	47.7	40.4	56.0	154			
31st	13.1	9.7	17.2	56	141.8	130.1	154.5	563	95.4	85.7	105.9	377	35.5	29.5	42.4	125			
32nd	12.0	9.2	15.6	67	142.2	132.5	152.6	861	87.7	80.1	96.1	521	62.9	56.9	69.7	420			
33rd	15.1	11.5	19.7	60	151.7	140.1	164.2	658	95.8	86.5	105.9	409	43.5	37.5	50.3	200			
34th	11.0	8.2	14.7	52	119.2	109.4	129.7	590	72.4	64.8	80.8	354	37.7	32.4	43.8	189			
35th	12.0	9.1	15.8	61	139.4	129.0	150.7	685	72.8	65.3	81.1	358	38.6	33.1	45.0	172			
36th	11.6	8.3	16.2	44	126.7	115.4	139.1	503	83.0	73.9	93.3	325	28.9	23.8	35.2	118			
37th	11.0	8.2	14.7	53	125.2	115.4	135.9	619	81.7	73.7	90.5	396	31.0	26.4	36.5	163			
38th	13.5	10.3	17.5	63	134.3	123.8	145.6	629	81.4	73.3	90.3	381	33.4	28.3	39.4	152			
39th	15.7	12.1	20.1	69	126.4	115.5	138.0	533	70.7	62.7	79.5	307	41.0	34.6	48.1	150			
40th	13.6	10.5	17.7	68	120.2	110.9	130.4	634	69.6	62.6	77.5	367	47.1	41.4	53.6	252			
41st	12.2	9.2	16.1	57	98.1	89.6	107.3	510	56.9	50.5	64.1	297	35.7	30.6	41.5	184			
42nd	10.1	7.5	13.4	55	136.9	126.9	147.5	727	83.5	75.8	91.9	442	54.6	48.4	61.5	289			
43rd	11.4	8.0	16.7	41	114.9	104.1	127.3	457	71.8	63.2	82.0	278	33.7	28.1	40.9	140			
44th	10.3	7.2	14.6	39	138.3	125.1	152.7	426	78.6	68.8	89.6	248	48.1	40.2	57.1	133			
45th	9.3	6.3	13.4	35	121.0	109.3	133.8	429	79.6	70.0	90.2	276	39.4	33.1	46.7	143			
46th	11.2	8.3	14.9	54	99.8	91.2	109.2	520	60.3	53.5	67.8	310	36.8	31.8	42.6	199			
47th	9.5	6.3	13.7	31	160.4	146.3	175.5	504	97.7	86.8	109.6	308	52.0	43.9	61.2	147			
48th	10.7	7.9	14.5	48	94.5	86.0	103.8	470	56.8	50.3	64.2	281	48.5	42.6	55.3	248			
49th	11.9	9.1	15.5	61	143.7	133.2	154.9	721	83.6	75.7	92.3	418	43.3	37.7	49.5	221			
State	12.5	12.1	13.0	2851	136.7	135.1	138.2	30938	84.7	83.5	85.9	19183	43.5	42.6	44.4	9736			

Variations in Life Expectancy and Mortality Rates by State Legislative Districts

Chronic Obstructive Pulmonary Disease					All Unintentional Injuries					Unintentional Poisoning					Motor Vehicle Crash				
District	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths			
1st	31.6	25.9	38.4	111	25.4	20.7	31.1	107	7.7	5.3	11.0	35	8.8	4.9	15.0	17			
2nd	52.0	44.1	60.9	167	38.6	32.2	45.9	140	9.5	6.8	13.2	40	15.8	10.4	23.8	29			
3rd	65.8	58.3	74.0	296	66.0	58.5	74.3	297	19.0	15.0	24.0	78	12.8	8.5	19.0	29			
4th	48.4	42.2	55.3	230	47.5	41.4	54.5	222	9.5	6.8	13.1	42	12.7	8.2	19.0	26			
5th	35.0	28.3	42.8	104	29.1	23.6	35.5	114	9.1	6.5	12.7	43	11.9	7.1	19.6	22			
6th	49.2	42.9	56.4	226	52.3	45.6	59.9	230	9.2	6.4	13.1	35	17.3	11.9	24.6	35			
7th	47.5	42.0	53.8	278	51.5	45.0	58.9	256	9.7	6.9	13.5	44	29.2	22.1	38.1	66			
8th	41.6	35.8	48.2	190	30.1	25.0	35.9	131	11.3	8.2	15.2	46	10.5	6.5	16.3	22			
9th	40.0	33.8	47.2	149	34.2	28.6	40.8	135	6.0	3.7	9.3	21	11.9	7.6	18.1	27			
10th	36.2	31.4	41.8	210	43.0	37.0	49.9	205	13.1	9.6	17.5	52	16.5	11.2	23.7	33			
11th	34.3	28.2	41.3	117	29.2	24.0	35.3	118	9.4	6.8	12.9	44	12.3	7.8	18.9	25			
12th	41.5	36.3	47.5	230	39.5	33.8	45.9	188	9.4	6.6	13.0	40	21.0	15.1	28.6	44			
13th	38.2	32.6	44.7	168	40.0	34.0	46.8	168	8.1	5.4	11.7	31	23.6	17.4	31.5	51			
14th	39.0	33.6	45.1	194	45.1	38.8	52.3	195	9.6	6.7	13.4	37	28.0	20.9	37.0	54			
15th	41.0	34.5	48.3	148	34.3	28.7	40.7	138	6.4	4.1	9.7	25	24.9	18.5	33.0	53			
16th	44.8	38.7	51.7	199	41.9	35.8	48.9	174	9.9	7.0	13.7	39	25.9	19.2	34.4	52			
17th	42.6	36.2	49.9	164	47.5	41.0	55.0	192	9.8	7.0	13.5	40	18.0	12.7	25.2	38			
18th	35.6	29.3	43.1	116	39.2	32.8	46.7	139	8.8	6.0	12.6	33	16.0	10.5	23.7	29			
19th	62.3	55.8	69.6	346	59.1	51.7	67.4	258	21.3	16.7	26.9	79	21.6	15.2	30.0	40			
20th	48.6	42.8	55.2	263	39.8	34.0	46.3	182	9.7	6.9	13.5	41	19.5	13.9	26.9	41			
21st	37.7	31.6	44.6	143	31.8	26.6	38.0	133	9.0	6.4	12.5	40	8.9	5.0	15.1	16			
22nd	37.8	32.9	43.4	222	32.5	27.8	37.9	180	7.7	5.5	10.7	41	9.1	5.6	14.2	21			
23rd	31.2	26.6	36.5	174	31.7	26.7	37.6	154	5.7	3.6	8.8	24	10.1	6.2	16.0	22			
24th	39.0	34.7	44.1	310	41.6	35.9	48.3	239	13.7	10.2	18.3	60	15.1	10.1	22.1	34			
25th	44.6	38.1	51.9	175	37.7	32.0	44.3	158	10.9	8.0	14.6	49	14.8	9.9	21.6	30			
26th	41.2	35.6	47.6	202	37.5	32.0	43.9	173	8.2	5.7	11.6	37	12.9	8.4	19.2	28			
27th	51.6	44.7	59.4	212	37.3	31.7	43.7	165	10.6	7.7	14.3	47	10.4	6.6	16.2	24			
28th	40.4	34.8	46.8	189	29.8	24.9	35.5	136	7.6	5.1	11.0	31	8.7	5.2	14.1	19			
29th	58.2	50.3	67.1	201	43.3	36.8	50.8	162	14.5	10.8	19.0	55	11.9	7.4	18.7	23			
30th	52.6	45.0	61.2	179	37.5	31.4	44.4	142	12.9	9.6	17.1	53	13.4	8.5	20.5	25			
31st	37.4	31.3	44.3	143	37.5	31.8	43.9	165	10.6	7.9	14.2	51	18.0	12.8	25.2	40			
32nd	33.0	28.2	38.5	186	39.3	33.7	45.6	195	17.8	14.0	22.5	78	6.0	3.1	10.7	13			
33rd	38.7	32.7	45.5	157	32.2	26.9	38.2	137	11.3	8.3	15.1	48	10.0	6.1	16.1	20			
34th	29.5	24.6	35.2	139	32.4	27.2	38.5	146	8.6	6.1	11.9	41	15.4	10.2	22.6	29			
35th	45.3	39.4	52.0	224	45.6	39.1	52.9	195	12.8	9.4	17.2	53	19.6	14.0	27.0	43			
36th	27.3	22.0	33.8	101	32.7	27.3	39.2	142	13.0	9.8	17.4	61	6.8	3.5	13.0	14			
37th	30.8	25.9	36.5	146	34.0	28.8	40.0	156	13.5	10.3	17.5	63	10.6	6.6	16.5	22			
38th	51.1	44.5	58.4	229	49.4	43.1	56.5	227	23.5	19.2	28.6	107	11.8	7.9	17.4	30			
39th	45.4	39.0	52.7	187	48.8	42.4	55.9	223	13.8	10.6	17.7	66	16.6	11.6	23.5	37			
40th	34.3	29.4	40.1	178	33.4	27.7	40.0	139	8.3	5.4	12.4	28	8.5	4.9	14.4	18			
41st	16.0	12.6	20.3	78	22.4	18.1	27.6	102	5.3	3.2	8.3	21	6.2	3.2	11.4	12			
42nd	38.0	32.8	43.9	201	27.2	22.5	32.6	125	6.5	4.3	9.6	27	18.0	12.8	24.7	41			
43rd	18.1	13.9	24.0	70	37.2	31.3	44.6	160	17.2	13.4	22.8	75	4.8	2.2	11.9	11			
44th	41.1	34.0	49.4	125	31.7	26.1	38.3	123	10.7	7.9	14.6	48	8.4	4.9	14.4	18			
45th	24.0	18.8	30.4	78	24.3	19.4	30.2	94	5.5	3.5	8.7	24	9.1	5.1	15.7	17			
46th	21.3	17.2	26.3	100	33.0	28.1	38.7	165	8.6	6.2	11.9	42	9.4	5.8	14.8	22			
47th	36.7	30.2	44.3	117	34.2	28.4	41.1	126	8.3	5.7	11.8	35	13.5	8.6	21.2	25			
48th	20.1	16.1	25.0	91	23.1	18.9	28.3	106	6.1	4.0	9.2	26	8.9	5.2	14.7	17			
49th	40.6	35.1	46.9	200	47.0	40.9	53.9	219	14.7	11.3	18.9	65	15.9	11.0	22.5	35			
State	39.4	38.6	40.3	8663	37.5	36.7	38.3	8176	10.4	10.0	10.9	2241	13.8	13.1	14.6	1439			

Variations in Life Expectancy and Mortality Rates by State Legislative Districts

Stroke					Diabetes					All Suicides					Firearm Suicide				
District	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths		Age-Adj Rate	Lower CI	Upper CI	Deaths		Age-Adj Rate	Lower CI	Upper CI	Deaths	
1st	34.8	28.8	41.7	125	15.9	12.1	20.7	61		14.8	11.3	19.1	65		5.2	3.2	8.1	23	
2nd	37.7	30.9	45.7	114	25.4	20.1	31.7	88		19.9	15.6	25.0	79		10.2	7.3	14.2	41	
3rd	42.8	36.9	49.5	199	27.9	23.2	33.4	129		19.3	15.3	24.2	85		7.3	5.0	10.5	33	
4th	32.4	27.5	38.2	157	22.2	18.1	27.0	108		14.0	10.5	18.2	59		7.7	5.2	11.1	32	
5th	27.2	21.3	34.3	78	17.9	13.3	23.7	54		11.4	8.4	15.4	53		6.3	4.2	9.3	32	
6th	45.8	39.7	52.7	216	23.9	19.5	29.1	111		19.2	15.0	24.3	77		10.5	7.5	14.4	43	
7th	38.9	33.8	44.7	215	19.9	16.4	24.3	114		18.3	14.3	23.1	83		12.0	8.8	16.0	55	
8th	27.0	22.4	32.4	124	31.8	26.8	37.6	147		12.1	9.0	16.1	51		8.4	5.8	11.9	35	
9th	38.1	32.1	44.9	146	25.8	20.9	31.6	100		9.6	6.8	13.4	40		6.0	3.8	9.2	24	
10th	38.5	33.6	44.1	230	18.2	14.8	22.4	106		15.1	11.4	19.7	63		8.0	5.5	11.4	36	
11th	30.3	24.7	36.9	106	17.6	13.5	22.7	67		11.8	8.8	15.7	53		2.9	1.5	5.3	13	
12th	33.3	28.6	38.7	186	19.0	15.5	23.3	105		12.6	9.4	16.6	57		6.7	4.6	9.7	33	
13th	35.1	29.7	41.3	153	25.8	21.2	31.2	115		15.9	12.2	20.5	65		9.8	6.9	13.6	40	
14th	38.8	33.5	44.9	197	18.8	15.1	23.4	91		18.1	14.0	23.0	72		9.3	6.6	12.9	40	
15th	36.7	30.5	43.7	128	21.8	17.2	27.4	78		10.9	7.9	14.8	44		6.1	3.9	9.3	24	
16th	35.5	30.2	41.6	164	28.0	23.2	33.5	127		13.5	10.1	17.7	54		7.5	5.0	10.9	30	
17th	31.9	26.5	38.2	126	25.0	20.3	30.7	102		15.7	12.1	20.2	66		8.1	5.6	11.5	35	
18th	36.8	30.5	44.2	122	23.0	18.0	28.9	78		15.0	11.3	19.7	59		6.5	4.1	9.9	25	
19th	41.3	36.2	47.3	235	38.5	33.1	44.7	199		20.9	16.5	26.4	84		11.0	7.9	15.2	46	
20th	32.8	28.0	38.3	169	21.9	18.1	26.4	124		16.0	12.4	20.4	74		9.6	6.9	13.1	45	
21st	30.8	25.4	37.1	119	19.0	14.9	24.0	78		14.7	11.2	19.1	63		7.1	4.7	10.4	30	
22nd	31.5	27.1	36.5	195	17.8	14.5	21.9	103		13.0	9.9	16.8	65		7.3	5.1	10.3	37	
23rd	30.7	26.2	36.0	172	17.4	14.0	21.5	98		10.7	7.7	14.6	46		4.9	3.0	7.7	22	
24th	35.3	31.3	40.1	290	19.1	16.0	22.8	150		17.1	13.3	21.8	89		8.7	6.2	12.0	52	
25th	41.7	35.4	48.8	163	23.1	18.5	28.4	94		14.8	11.3	19.1	64		6.3	4.1	9.4	26	
26th	32.3	27.4	38.1	156	20.1	16.2	24.7	100		16.1	12.5	20.6	71		9.4	6.6	13.0	41	
27th	41.8	35.7	48.7	178	21.0	16.8	26.0	92		16.2	12.6	20.6	73		5.9	3.8	8.9	26	
28th	39.4	34.0	45.5	194	21.3	17.3	26.1	100		15.0	11.5	19.4	65		6.6	4.3	9.8	28	
29th	58.2	50.3	67.1	197	35.1	29.0	42.0	124		20.2	16.0	25.3	81		7.7	5.2	11.0	32	
30th	38.4	32.0	45.9	131	28.8	23.4	35.1	105		15.3	11.7	19.8	63		8.1	5.5	11.6	33	
31st	29.8	24.5	36.1	111	18.1	14.1	23.0	76		15.0	11.6	19.1	71		6.9	4.7	10.0	32	
32nd	34.4	29.7	39.8	209	21.4	17.7	26.0	121		13.8	10.4	17.9	62		6.1	4.0	9.0	29	
33rd	34.7	29.2	41.0	149	23.0	18.6	28.2	100		15.1	11.6	19.6	62		7.9	5.4	11.3	33	
34th	30.5	25.6	36.2	147	21.5	17.4	26.4	103		13.0	9.7	17.2	56		6.9	4.5	10.2	28	
35th	34.7	29.5	40.8	164	18.5	14.8	23.0	92		18.5	14.4	23.4	81		9.6	6.9	13.2	46	
36th	27.0	21.9	33.3	105	14.9	11.3	19.8	61		14.1	10.7	18.7	64		3.6	2.0	6.6	16	
37th	33.7	28.7	39.6	165	29.4	24.6	35.1	137		11.4	8.4	15.3	50		2.7	1.4	5.0	12	
38th	37.4	31.9	43.5	175	34.2	29.0	40.2	161		14.6	11.3	18.7	69		7.7	5.4	10.9	37	
39th	34.8	29.2	41.3	140	24.0	19.4	29.4	102		14.1	11.0	18.1	70		7.9	5.5	11.1	38	
40th	31.5	26.9	37.0	168	19.5	15.6	24.3	94		16.5	12.6	21.5	67		8.0	5.3	11.8	32	
41st	28.2	23.7	33.5	145	9.7	7.1	13.2	46		9.6	6.8	13.4	40		4.3	2.5	7.2	17	
42nd	35.1	30.2	40.8	185	22.1	18.1	26.8	111		13.4	10.3	17.4	64		6.6	4.5	9.5	32	
43rd	23.8	19.0	30.3	95	14.7	10.9	20.3	54		10.8	7.8	15.7	48		2.2	1.0	5.8	9	
44th	36.8	30.1	44.6	110	23.9	18.6	30.4	76		10.4	7.6	14.3	46		4.4	2.6	7.3	19	
45th	24.2	19.2	30.3	86	12.6	9.0	17.3	45		11.8	8.8	15.8	55		4.9	3.1	7.8	23	
46th	24.0	19.8	29.0	122	10.5	7.7	14.1	51		11.6	8.7	15.4	57		4.9	3.1	7.7	23	
47th	33.2	26.9	40.7	100	26.6	21.2	33.1	91		12.9	9.5	17.2	51		8.1	5.5	11.7	32	
48th	25.8	21.4	31.0	126	13.2	10.1	17.2	61		9.3	6.5	13.0	40		3.9	2.2	6.6	17	
49th	33.5	28.5	39.2	165	25.0	20.7	30.0	122		16.7	13.0	21.1	74		7.1	4.8	10.1	33	
State	34.4	33.6	35.2	7652	21.5	20.9	22.2	4852		14.3	13.8	14.8	3090		7.0	6.6	7.4	1520	

Chronic Liver Disease					Influenza and Pneumonia				
District	Age-Adj Rate	Lower CI	Upper CI	Deaths	Age-Adj Rate	Lower CI	Upper CI	Deaths	
1st	7.2	4.8	10.6	31	6.9297	4.4955	10.3803	26	
2nd	10.0	7.2	13.8	44	10.4827	7.1049	14.991	34	
3rd	21.8	17.5	27.0	91	12.0599	9.0766	15.8682	57	
4th	15.7	12.3	19.9	79	13.8695	10.7049	17.8295	67	
5th	7.9	5.3	11.7	33	9.2842	6.0694	13.6956	29	
6th	9.7	7.0	13.4	44	12.7684	9.6659	16.764	60	
7th	12.2	9.4	15.8	71	7.6749	5.4809	10.7046	42	
8th	10.7	8.0	14.2	53	7.6773	5.3755	10.7748	37	
9th	10.6	7.6	14.6	43	11.1445	8.0885	15.1125	45	
10th	11.2	8.4	15.0	59	8.7623	6.4716	11.9012	51	
11th	8.1	5.6	11.5	36	10.3885	7.2486	14.5439	37	
12th	14.7	11.5	18.6	78	10.4262	7.7634	13.889	54	
13th	14.0	10.7	18.2	65	13.6872	10.4094	17.8232	60	
14th	12.8	9.6	16.8	59	11.5688	8.6988	15.2502	57	
15th	13.7	10.3	17.9	57	9.0449	6.1287	12.9303	31	
16th	14.9	11.5	19.1	68	10.0021	7.237	13.5961	45	
17th	8.3	5.6	11.8	34	8.4871	5.7616	12.1507	32	
18th	10.3	7.3	14.4	41	10.8543	7.5185	15.2656	36	
19th	17.7	14.0	22.2	88	16.3284	13.0925	20.4116	92	
20th	9.9	7.4	13.3	56	10.4488	7.8251	13.8524	54	
21st	10.0	7.2	13.6	44	9.1025	6.3227	12.7954	36	
22nd	8.9	6.5	12.0	48	8.1854	5.9944	11.0665	49	
23rd	12.9	9.9	16.8	67	7.3625	5.2443	10.3284	41	
24th	12.0	9.1	15.7	72	8.5644	6.4509	11.5019	65	
25th	9.9	7.2	13.4	46	14.2957	10.8275	18.624	59	
26th	13.4	10.4	17.2	73	10.9879	8.1953	14.589	53	
27th	11.3	8.5	15.0	55	8.4456	6.0259	11.7061	41	
28th	8.8	6.2	12.2	40	10.1698	7.5182	13.6291	50	
29th	14.5	10.9	18.9	58	10.9761	7.6575	15.2995	36	
30th	12.5	9.3	16.7	54	10.5057	7.2897	14.7517	36	
31st	11.4	8.6	15.1	59	8.6378	5.8969	12.2951	33	
32nd	13.0	10.0	16.8	67	9.7178	7.3342	12.8638	60	
33rd	12.5	9.4	16.4	57	14.9884	11.5112	19.3037	66	
34th	13.1	10.1	16.8	68	10.1306	7.4992	13.5718	52	
35th	12.2	9.3	15.8	67	9.1796	6.6007	12.6428	43	
36th	9.4	6.8	13.4	44	7.2338	4.8835	10.9018	31	
37th	9.2	6.6	12.7	43	9.0872	6.6349	12.3672	47	
38th	16.1	12.7	20.3	80	9.5987	6.846	13.1669	41	
39th	10.5	7.9	13.9	58	9.9171	7.0209	13.6857	40	
40th	8.7	6.1	12.3	41	8.3697	6.0607	11.6075	44	
41st	6.7	4.5	9.7	32	7.194	5.0699	10.2025	38	
42nd	10.7	8.0	14.1	55	8.0361	5.8102	11.0001	44	
43rd	13.9	10.4	19.3	55	5.4116	3.3972	9.4433	24	
44th	7.7	5.1	11.3	33	11.2921	7.7374	16.0435	34	
45th	5.4	3.5	8.3	27	5.6744	3.4447	9.0442	21	
46th	7.6	5.3	10.7	38	7.7474	5.4805	10.8453	40	
47th	10.4	7.5	14.3	45	9.6171	6.3707	14.0042	29	
48th	6.2	4.1	9.2	28	4.8643	3.0888	7.5476	24	
49th	12.3	9.4	16.0	62	7.0604	4.9132	9.9737	36	
State	11.1	10.7	11.6	2646	9.6072	9.2002	10.029	2159	